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OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE
AGRICULTURAL EXPERIMENT STATION

W. L. BLIZZARD, *Director*

LOUIS E. HAWKINS, *Vice Director*

Host Index of Oklahoma Plant Diseases

By D. A. PRESTON



Stillwater, Oklahoma

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CONTENTS

Introduction	5
Host Index	7
Index to Pathogens or Causal Agents	115
Index to Common Names of Hosts	160

For use by gardeners and truck crop growers, the Oklahoma Agricultural Experiment Station has published Circular C-117, "Recognition and Control of Vegetable Diseases." Diseases of field crops are dealt with in Circular C-119, "Diseases of Field Crops in Oklahoma."

The host index was prepared to aid plant pathologists, crop and horticultural specialists, nursery and crop inspectors, county agents, and others who are called upon to help farmers and gardeners prevent loss of crops by plant diseases. The first step in control is to identify the organism or other cause responsible for the disease. This host index will assist in more rapid identification, by indicating what diseases are known to occur on plants in Oklahoma. Diseases of wild plants are included since in many cases the same diseases are found on both wild and cultivated hosts, and these wild host plants serve as a means of spreading the diseases.

Host Index of Oklahoma Plant Diseases

By D. A. PRESTON

Introduction

This bulletin contains, in the form of a host index, all available information on the occurrence and distribution of the 2,110 plant diseases so far recorded in Oklahoma. This total represents only a small portion of the plant diseases which are known to occur wherever plants grow.

Arrangement of Indexes

This publication is divided into three sections, each arranged alphabetically:

1. A host index in which each host plant is listed together with all the pathogens or causal agents known to occur in Oklahoma.
2. An index of pathogens or causal agents each of which is followed by the hosts upon which it has been reported in Oklahoma.
3. An index to the common names of the host plants, taken chiefly from *Standardized Plant Names*, 2nd edition, 1942.

The distribution of diseases, given by counties in the host index, merely indicates the known reports. In many cases the diseases of any given plant may actually have a more widespread distribution in the State than is shown by the reports at hand.

History of the Oklahoma Host Index

The first contribution toward a host index to plant diseases in Oklahoma was compiled by Charles C. Brown, and was issued as Mimeographed Circular No. 33 of the Oklahoma Agricultural Experiment Station in 1939. The list contained a record of 819 diseases found on various plants. In 1941 a

revision of this circular appeared, arranged by Wayne Jackson, which brought the total number of plant disease records up to 1,171. These reports were prepared under the direction of K. Starr Chester as part of Project 317 ("Oklahoma Plant Disease Problems") of the Oklahoma Agricultural Experiment Station. A supplementary list of 467 plant diseases was published in 1943 as Mimeographed Circular No. M-104, raising the number of plant disease records in the State of Oklahoma to 1,638. Since the great demand for these mimeographed lists exhausted the supply shortly after publication, it seemed advisable to make the information available in printed form.

This bulletin contains an additional 536 records of plant diseases and their causal agents found in Oklahoma. Some records (64) from Circular No. 33 have been deleted because of inaccuracy in determinations or inconclusive data, thus bringing to 2,110 the total number of plant diseases so far recorded in Oklahoma.

HOST INDEX

ACALYPHA

- A. GRACILENS A. Gray, SLENDER COPPERLEAF.
Cercospora acalyphae Peck, Leaf spot; Payne.
- A. OSTRYAEFOLIA Riddell, HOPHORNBEAM COPPER-LEAF.
Cercospora acalyphae Peck, Leaf spot; Payne.

ACER

- A. NEGUNDO L., BOXELDER.
Macrophoma negundinis Ell. & Ev., Leaf spot; Adair.
Valsaria allantospora Ell. & Ev.; Payne.
- A. RUBRUM L., RED MAPLE.
Phyllosticta minima (Berk. & Curt.) Ell. & Ev., Leaf spot; Le Flore, McCurtain.
Taphrina dearnessii Jenk., Leaf blister; Le Flore.
- A. SACCHARINUM L., SILVER MAPLE.
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Texas.
Phleospora aceris (Lib.) Sacc., Leaf spot; Oklahoma.
Rhizoctonia solani Kuhn, Damping off.
- A. SACCHARUM Marsh., SUGAR MAPLE.
Leptothyrium acerinum Ktze., Leaf spot; McCurtain.
- A. SPP., MAPLE.
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Oklahoma.
Cercospora sp., Leaf Spot; Payne.
Cytospora chrysosperma Pers. ex Fr., Canker; Creek.
Fomes sp., Heart rot; Payne.
Gloeosporium apocryptum Ell. & Ev., Leaf blight; Payne.
Phoradendron flavescens (Pursh) Nutt., Mistletoe; Haskell.
Polyporus gilvus (Schw.) Fr., Wood rot; Payne.
Rhytisma acerinum (Pers.) Fr., Tar leaf spot; Oklahoma.
Schizophyllum commune Fr., Canker; Osage.

ACHILLEA

- A. MILLEFOLIUM L., COMMON YARROW.
Gloeosporium sp., Anthracnose; Payne.

ACNIDA

A. TAMARISCINA (Nutt.) Wood, WATERHEMP.
Albugo bliti (Biv.) Kuntze, White rust; Kay, Payne.

ACTINEA

A. LINEARIFOLIA (Hook.) Kuntze, FINELEAF ACTINEA.
Cuscuta indecora Choisy, Dodder; Greer.

AEGILOPS

A. CYLINDRICA Host, JOINTED GOATGRASS.
Ascochyta sp., Leaf spot; Payne.
Puccinia graminis Pers., Stem rust; Payne.
Uromyces graminicola Burr., Rust; Payne.

AESCHULUS

A. GLABRA Willd., OHIO BUCKEYE.
Guignardia aesculi (Pk.) V.B.Stewart, Leaf blotch.
A. HIPPOCASTANUM L., COMMON HORSECHESTNUT.
Guignardia aesculi (Pk.) V.B.Stewart, Leaf blotch;
Payne.
A. OCTANDRA Marsh., YELLOW BUCKEYE.
Guignardia aesculi (Pk.) V.B.Stewart, Leaf blotch.
A. PAVIA L., RED BUCKEYE.
Phyllosticta paviae Desm., Leaf spot; Tulsa.

AGROPYRON

A. CRISTATUM (L.) Gaertn., CRESTED WHEATGRASS.
Septoria sp., Leaf spot; Woodward.
A. DASYSTACHYUM (Hook.) Scribn., THICKSPIKE WHEATGRASS.
Puccinia graminis Pers., Stem rust; Payne.
A. ELONGATUM (Host) Beauv., TALL WHEATGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Payne.
A. INERME (Scribn.& Smith) Rydb., BEARDLESS BLUE-BUNCH WHEATGRASS.
Puccinia graminis Pers., Stem rust; Payne.
A. INTERMEDIUM (Host) Beauv.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Payne.
A. REPENS (L.) Beauv., QUACKGRASS.
Claviceps purpurea (Fr.) Tul., Ergot; Payne, Washita.
A. SMITHII Rydb., BLUESTEM WHEATGRASS.
Claviceps purpurea (Fr.) Tul., Ergot; Osage, Payne.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Payne.

AGROPYRON—Continued.

Puccinia graminis Pers., Stem rust; Payne.
Puccinia rubigo-vera agropyrina (Erikss.) Arth., Leaf rust.
 A. **TRACHYCAULUM** (Link) Malte, SLENDER WHEAT-GRASS.
Ascochyta agropyrina (Fairm.) Trott., Leaf spot; Payne.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Puccinia graminis Pers., Stem rust; Payne, Woodward.
Septoria sp., Leaf spot; Woodward.
 A. **TRICHOPHORON** (Link) Richt., STIFFHAIR WHEAT-GRASS.
Puccinia rubigo-vera tritici (Erikss. & Henn.) Carl., Leaf rust; Payne.

AGROSTIS

A. **GIGANTEA** Roth., REDTOP.
Puccinia graminis Pers., Stem rust.
 A. **PALUSTRIS** Huds., CREEPING BENTGRASS.
Fusarium sp., Root rot; Kiowa.
 A. **PERENNANS** (Walt.) Tuckerm., AUTUMN BENT-GRASS.
Cercospora agrostidis Atk., Leaf spot; Cleveland.
 A. **SCABRA** Willd., WINTER BENTGRASS.
Claviceps purpurea (Fr.) Tul., Ergot.
 A. SP., BENTGRASS.
Rhizoctonia solani Kuhn, Brown patch; Tulsa.

AILANTHUS

A. **ALTISSIMA** (Mill.) Swingle, TREEOFHEAVEN AILANTHUS.
Cercospora glandulosa Ell. & Kell., Leaf spot; Payne.
Nectria cinnabarinina Tode ex Fr., Dieback; Payne.

ALBIZZIA

A. **JULIBRISSIN** Durazz., SILKTREE ALBIZZA.
Nectria cinnabarinina Tode ex Fr., Dieback; Beckham, Payne.
Valsa sp., Canker; Payne.

ALLIUM

A. **CEPA** L., GARDEN ONION.
Aspergillus niger van Tiegh., Black mold; Payne.
Botrytis allii M.T. Munn, Neck rot; Oklahoma, Payne.
Erwinia carotovora (Jones) Winslow et al., Soft rot; general, with collection from Tulsa.

ALLIUM—Continued.

Fusarium mali Taub., Pink rot; Payne.
Peronospora schleideni Ung., Downy mildew.
Sclerotium rolfsii Sacc., Southern wilt; Payne.
Stemphylium botryosum Wallr., Leaf blight.
Urocystis cepulae Frost, Smut.

ALNUS

A. INCANA (L.) Moench, SPECKLED ALDER.
Taphrina robinsoniana Gies., Catkin hypertrophy; McCurtain.
A. RUGOSA (Du Roi) Spreng., HAZEL ALDER.
Cuscuta compacta Juss., Dodder; Le Flore.
A. SP., ALDER.
Cuscuta compacta Juss., Dodder; Le Flore.

ALOPECURUS

A. CAROLINIANUS Walt., CAROLINA FOXTAIL.
Scolecotrichum graminis Fckl., Brown stripe; Payne.
A. GENICULATUS L., WATER FOXTAIL.
Scolecotrichum graminis Fckl., Brown stripe; Payne.

ALTHAEA

A. ROSEA (L.) Cav., HOLLYHOCK.
Cercospora althaeina Sacc., Leaf spot; Payne.
Endophyllum tuberculatum (Ell. & Kell.) Arth. & Fromme, Rust.
Heterodera marioni (Cornu) Goodey, Root knot; Logan.
Puccinia malvacearum Bert., Rust; general, with collections from Logan, Payne.
Septoria malvicola Ell. & Mart., Leaf spot; Payne.
A. SP.
Nectria cinnabarinina Tode ex Fr., Canker; Payne.

AMARANTHUS

A. RETROFLEXUS L., REDROOT AMARANTH.
Albugo bliti (Biv.) Kuntze, White rust; Canadian, Choctaw, Payne.
Alternaria sp.; Payne.
A. SPINOSUS L., SPINY AMARANTH.
Albugo bliti (Biv.) Kuntze, White rust; Payne.

AMARYLLIS

A. SPP., AMARYLLIS.

Botrytis cinerea Pers., Gray mold; Payne.
Colletotrichum liliacearum Ferraris, Anthracnose;
 Payne.
Virus, Mosaic; Payne.

AMBROSIA

A. ARTEMISIIFOLIA L., COMMON RAGWEED.

Puccinia xanthii Schw., Rust; Payne.

A. PSILOSTACHYTA DC., WESTERN RAGWEED.

Cuscuta arvensis Beyrich, Dodder; Payne.

Cuscuta coryli Engelm., Dodder; Beckham.

Cuscuta cuspidata Engelm., Dodder; Cleveland.

Cuscuta indecora Choisy, Dodder; Beckham.

A. TRIFIDA L., GIANT RAGWEED.

Cercospora arcti-ambrosiae Halst., Leaf spot; Payne.

Cuscuta cuspidata Engelm., Dodder; Muskogee.

Cuscuta sp., Dodder; Texas.

Erysiphe cichoracearum DC., Powdery mildew; Ottawa,
 Rogers.

Plasmopara halstedii (Farl.) Berl. & De Toni, Downy
 mildew; Cherokee, Payne.

Puccinia xanthii Schw., Rust; Kay, Payne.

A. SP., RAGWEED.

Cuscuta obtusiflora HBK., Dodder; Cleveland.

AMORPHA

A. CANESCENS Pursh, LEADPLANT AMORPHA.

Uropyxis amorphae (Curt.) Schroet., Rust; Osage,
 Payne.

A. FRUTICOSA L., INDIGO BUSH AMORPHA.

Cylindrosporium passaloroides (Wint.) Gilm. & Arch.,
 Leaf spot; Payne.

Uropyxis amorphae (Curt.) Schroet., Rust; Payne.

AMPELOPSIS

A. ARBOREA (L.) Koehne, PEPPERVINE.

Cuscuta gronovii Willd., Dodder; Muskogee.

ANCHUSA

A. MYOSOTIDIFLORA Lehm., HEARTLEAF BRUNNERA.

Heterodera marioni (Cornu) Goodey, Root knot;
 Oklahoma.

ANDROPOGON

A. FURCATUS Muhl., BIG BLUESTEM.
Cerebella andropogonis Ces., Blackhead: False smut;
 Carter, Lincoln, Pawnee, Payne, Pittsburg.
Claviceps purpurea (Fr.) Tul., Ergot; Carter.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Phyllachora luteo-maculata (Schw.) Orton, Black
 spot; Payne.
Puccinia andropogonis Schw., Leaf rust; Payne.
Puccinia tripsaci Diet. & Holw., Leaf rust.
Septoria andropogonis J.J.Davis, Leaf spot.
Sorosporium ellisii Wint., Head smut; Osage, Payne.
Sphacelotheca occidentalis (Seym.) Clinton, Kernel
 smut; Payne.
Stagonospora ischaemi Sacc.; Payne.

A. GLOMERATUS (Walt.) B.S.P., BUSHY BLUESTEM.
Puccinia andropogonis Schw., Leaf rust.

A. HALLII Hack., SAND BLUESTEM.
Claviceps purpurea (Fr.) Tul., Ergot; Payne.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Stagonospora ischaemi Sacc.; Cleveland.

A. ISCHAEMUM L., EASTINDIES BLUESTEM.
Cerebella andropogonis Ces., Blackhead: False smut;
 Payne.

A. SACCHAROIDES Swartz, SILVER BLUESTEM.
Cerebella andropogonis Ces., Blackhead: False smut;
 Lincoln, Payne.
Helminthosporium sp., Leaf spot; Payne.
Phyllachora luteo-maculata (Schw.) Orton, Black
 spot; Lincoln, Oklahoma, Payne, Seminole, Tulsa.
Ustilago sp., Smut; Payne.

A. SCOPARIUS Michx., LITTLE BLUESTEM.
Cerebella andropogonis Ces., Blackhead: False smut;
 Lincoln, Payne, Pittsburg.
Claviceps purpurea (Fr.) Tul., Ergot; Payne.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Payne, Woodward.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Phyllachora luteo-maculata (Schw.) Orton, Black
Phyllachora luteo-maculata (Schw.) Orton, Black
 spot; Payne.
Puccinia andropogonis Schw., Rust; Payne.
Puccinia ellisiana Thum., Rust; Osage, Payne.
Sphacelotheca occidentalis (Seym.) Clinton, Kernel
 smut; Lincoln, Payne.

ANDROPOGON—Continued.

A. TERNARIUS Michx.

Cerebella andropogonis Ces., Blackhead: False smut; Payne, Pittsburg.

Ellisiella caudata (Pk.) Sacc., Leaf spot; Mayes.

Puccinia andropogonis Schw., Leaf rust; Payne, Pittsburg.

A. VIRGINICUS L., YELLOWSEDGE BLUESTEM: BROOMSEDGE.

Puccinia andropogonis Schw., Leaf rust.

A. SP., BLUESTEM.

Erysiphe graminis DC., Powdery mildew; Mayes.

ANTENNARIA

A. PLANTAGINIFOLIA (L.) Richards., PLANTAINLEAF PUSSYTOES.

Albugo tragopogonis (Pers.) S.F.Gray, White rust; Payne.

ANTHURIUM

A. ANDRAEANUM Lind., FLAMINGO ANTHURIUM.

Gloeosporium minutum, Anthracnose; Payne.

A. ANDRAEANUM var. GIGANTEUM, GIANT FLAMINGO ANTHURIUM.

Gloeosporium minutum, Anthracnose; Payne.

ANTIRRHINUM

A. MAJUS L., COMMON SNAPDRAGON.

Botrytis sp., Blight; Oklahoma.

Fusarium sp., Wilt; Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Lincoln, Tulsa.

Peronospora antirrhini Schroet., Downy mildew; Oklahoma.

Phytophthora cryptogea Pethyb.& Laff., Damping off; Oklahoma, Payne.

Puccinia antirrhini Diet.& Holw., Rust; Payne.

Rhizoctonia solani Kuhn, Damping off; Oklahoma.

Verticillium alboatrum Reinke & Berth., Wilt; Comanche.

Virus, Ringspot; Payne.

Nonparasitic, Fasciation; Payne.

Nonparasitic, Tip blight; Oklahoma.

APIUM

A. GRAVEOLENS var. DULCE DC., GARDEN CELERY.
Cercospora apii Fres., Early blight; Payne.
Septoria apii (B.& C.) Chester, Late blight; general
 with collections from Creek, Payne.
Virus, Celery mosaic; Payne.

APLOPAPPUS

A. CILIATUS (Nutt.) DC., ROSINWEED.
Cicinnobolus cesatii DeBy., Parasitic on
Erysiphe cichoracearum DC. on living leaves; Payne.
Cuscuta arvensis Beyrich, Dodder; Pottawatomie.
Cuscuta cuspidata Engelm., Dodder; Jackson,
 Pottawatomie.
Erysiphe cichoracearum DC., Powdery mildew; Payne.
Septoria sp., Leaf spot; Okmulgee, Payne.

A. DIVARICATUS (Nutt.) A. Gray, GOLDENWEED.
Cuscuta cuspidata Engelm., Dodder; Kiowa.

APOCYNUM

A. ANDROSAEMIFOLIUM L., SPREADING DOGBANE.
Cylindrosporium apocyni Ell.& Ev., Leaf spot; Hughes.

A. CANNABINUM L., HEMP DOGBANE.
Cylindrosporium apocyni Ell.& Ev., Leaf spot; Payne.
Phyllosticta apocyni Trel., Leaf spot; Payne.

A. SIBIRICUM Jacq., PRAIRIE DOGBANE: INDIAN
 HEMP.
Puccinia seymouriana Arth., Rust.

AQUILEGIA

A. SP., COLUMBINE.
Heterodera marioni (Cornu) Goodey, Root knot;
 Tulsa.
Sclerotium rolfsii Sacc., Southern wilt; Tulsa.

ARABIS

A. LAEVIGATA (Muhl.) Poir., SMOOTH ROCKCRESS.
Albugo candida (Pers. ex Lev.) Kuntze, White rust;
 Comanche.

ARACHIS

A. HYPOGAEA L., PEANUT.
Botrytis sp.
Cercospora arachidicola Hori, Leaf spot; Hughes,
 Payne.

ARACHIS—Continued.

Cercospora personata (Berk.& Curt.) Ell.& Ev., Leaf spot; Carter, Hughes, Johnston, Okfuskee, Okmulgee, Payne, Pontotoc.

Diplodia frumenti Ell.& Ev., Stem rot; Okmulgee, Payne.

Fusarium sp., Root rot; Okfuskee.

Rhizoctonia solani Kuhn, Root rot; general with collections from Carter, Hughes, Johnston, Okfuskee, Okmulgee.

Sclerotium bataticola Taub., Charcoal rot; Okmulgee.

Sclerotium rolfsii Sacc., Stem rot; Choctaw.

ARGEMONE

A. MEXICANA L., MEXICAN PRICKLEPOPPY.

Septoria argemones Tharp, Leaf spot; Cherokee, Garfield.

ARISAEMA

A. ATRORUBENS (Ait.) Blume., COMMON JACKINTHE-PULPIT.

Uromyces caladii (Schw.) Farl., Rust; Adair.

A. DRACONTIUM (L.) Schott, DRAGONROOT JACKINTHEPULPIT.

Uromyces caladii (Schw.) Farl., Rust; Delaware, Muskogee, Osage, Payne.

ARISTIDA

A. BASIRAMEA Engelm., FORKTIP THREEAWN.

Uromyces peckianus Farl., Rust.

A. CURTISSII (A. Gray) Nash, CURTISS THREEAWN.

Ellisiella caudata (Pk.) Sacc., Leaf spot; Adair.

Uromyces peckianus Farl., Rust; Payne.

A. DESMANTHA Trin.& Rupr., CURLY THREEAWN.

Uromyces peckianus Farl., Rust.

A. DICHOTOMA Michx., CHURCHMOUSE THREEAWN.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Adair.

A. LONGÉSPICA Poir., SLIMSPIKE THREEAWN.

Tilletia oklahomae Zundel, Kernel smut; Oklahoma.

Uromyces peckianus Farl., Rust; Cherokee.

A. OLIGANTHA Michx., PRAIRIE THREEAWN.

Uromyces peckinaus Farl., Rust; Logan, Payne.

A. PURPURASCENS Poir., ARROWFEATHER THREEAWN.

Hendersonia effusa Berk.& Curt.; Delaware.

A. PURPUREA Nutt., PURPLE THREEAWN.

Gloeosporium sp., Leaf & stem spot; Payne.

ARMORACIA

A. RUSTICANA Gaertn., HORSERADISH.
Albugo candida (Pers. ex Lev.) Kuntze, White rust.
Erwinia carotovora (Jones) Winslow et al., Soft rot; Grant.
Heterodera marioni (Cornu) Goodey, Root knot; Payne.

ARONIA

A. SP., CHOKEBERRY.
Phyllosticta arbutifolia Ell. & Mart., Leaf spot; Oklahoma.

ARTEMISIA

A. GNAPHALODES Nutt., CUDWEED SAGEBRUSH.
Puccinia absinthii (Hedw.) DC., Rust.
A. LUDOVICIANA Nutt., LOUISIANA SAGEBRUSH.
Lasiosphaeria sp., Leaf spot; Payne.
Puccinia millefolii Fckl., Rust.
A. MEXICANA Willd., MEXICAN SAGEBRUSH.
Cuscuta arvensis Beyrich, Dodder; Muskogee.

ARUNDINARIA

A. GIGANTEA (Walt.) Chapm., GIANT CANE.
Didymella eumorpha (Berk. & Curt.) Sacc.; McCurtain.
Puccinia arundinariae Schw., Leaf rust; McCurtain.

ARUNDO

A. DONAX L., GIANTREED.
Scolecotrichum maculicola Ell. & Kell., Leaf spot; Payne.

ASCLEPIAS

A. SPECIOSA Torr., SHOWY MILKWEED.
Cercospora clavata (Gerard) Cke., Leaf spot; Payne.
A. TUBEROSA L., BUTTERFLY MILKWEED.
Puccinia bartholomaei Diet., Rust.

ASCLEPIODORA

A. DECUMBENS (Nutt.) A. Gray, SPIDER ANTHELOPE-HORN.
Phyllosticta tuberosa Ell. & Mart., Leaf spot; Murray.
Puccinia bartholomaei Diet., Rust.

ASCLEPIODORA—Continued.

A. *VIRIDIS* (Walt.) A.Gray, OBLONGLEAVED MILKWEED.

Alternaria fasciculata (Cke.& Ell.) Jones & Grout,
Leaf spot; Payne.

Puccinia bartholomaei Diet., Rust; Murray, Payne.

ASPARAGUS

A. *OFFICINALIS* L., GARDEN ASPARAGUS.

Alternaria fasciculata (Cke.& Ell.) Jones & Grout,
Leaf spot; Payne.

Cercospora asparagi Sacc., Leaf spot; Payne.

Erwinia carotovora (Jones) Winslow et al., Soft rot;
general.

Puccinia asparagi DC., Rust; Logan, Payne.

ASPIDISTRA

A. *ELATIOR* Blume, COMMON ASPIDISTRA.

Colletotrichum omnivorum Hals., Anthracnose; Payne.

ASTER

A. *DRUMMONDII* Lindl., DRUMMOND ASTER.

Puccinia asteris Duby, Rust; Payne.

Septoria asterina Tharp, Leaf spot; Payne.

A. *ERICOIDES* L., HEATH ASTER.

Cuscuta indecora Choisy, Dodder; McClain.

Erysiphe cichoracearum DC., Powdery mildew; Payne.

A. *SALICIFOLIUS* Ait., WILLOWLEAF ASTER.

Erysiphe cichoracearum DC., Powdery mildew; Payne.

ASTRAGALUS

A. *CICER* L.

Cercospora astragali Woronichin, Leaf spot; Payne.

A. *MEXICANUS* DC., GROUND PLUM.

Cercosporidium sp., Leaf spot; Choctaw.

AVENA

A. *SATIVA* L., COMMON OAT.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Choctaw, Grady, Payne.

Gibberella zeae (Schw.) Petch, Scab; Payne.

Helminthosporium sativum Pam., King, & Bakke, Foot with collection from Delaware.

Helminthosporium sativum Pam., King, & Bakke, Foot rot; Payne.

Pseudomonas coronafaciens (Ell.) Stapp, Halo blight; Comanche, Delaware, Payne.

AVENA—Continued.

Puccinia coronata Cda., Crown rust; general with collections from Canadian, Choctaw, Delaware, Garfield, Kingfisher, Payne.

Puccinia graminis avenae Erikes. & Henn., Stem rust; general with collections from Bryan, Delaware, Garfield, Payne.

Ustilago avenae (Pers.) Rostr., Loose smut; general with collections from Payne, Wagoner.

Ustilago kolleri Wille, Covered smut; general.

Nonparasitic, Blast.

AXONOPUS

A. COMPRESSUS (Swartz) Beauv., TROPICAL CARPET-GRASS.

Stagonospora sp.; Caddo.

BACOPA

B. SP., WATERHYSSOP.

Cuscuta arvensis Beyrich, Dodder; Washington.

BAPTISIA

B. AUSTRALIS (L.) R.Brown, BLUE WILDINDIGO.

Puccinia andropogonis onobrychidis (Burr.) Arth., Rust; Payne.

B. BRACTEATA (Muhl.) Ell., CREAM WILDINDIGO.

Puccinia andropogonis onobrychidis (Burr.) Arth., Rust; Payne.

BELAMCANDA

B. CHINENSIS (L.) DC., BLACKBERRYLILY.

Heterosporium iridis (Faut. & Roum.) Jacq., Leaf spot; Payne.

BERBERIS

B. MENTORENSIS L.M.Ames, MENTOR BARBERRY.

Phyllosticta berberidis Rabh., Leaf spot; Payne.

B. THUNBERGII DC., JAPANESE BARBERRY.

Phyllosticta japonica Thum., Leaf Spot; Payne.

BETA

B. VULGARIS L., COMMON BEET.

Cercospora beticola Sacc., Leaf spot; Cherokee, Payne, Seminole, Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Beckham, Ellis, Harmon, Seminole.

BETA—Continued.

Phoma betae (Oud.) Frank, Damping off; Seminole.
Septoria betae West., Leaf spot; Payne.
 B. **VULGARIS** var. **CICLA** L., SWISS CHARD.
Cercospora beticola Sacc., Leaf spot; Payne.

BETULA

B. **NIGRA** L., RIVER BIRCH.
Gloeosporium betularum Ell. & Mart., Leaf spot; Le Flore.
Phyllosticta betulina Sacc., Leaf spot; Tulsa.
Polyporus hirsutus Wulf ex Fr., Wood rot; Atoka.
Stereum rameale Schw., Trunk rot; Atoka.
 B. **PAPYRIFERA** Marsh., PAPER BIRCH.
Gloeosporium betularum Ell. & Mart., Leaf spot; Muskogee.

BOLTONIA

B. **DIFFUSA** Ell., PANICLED BOLTONIA.
Guidnardia boltoniae Dearn. & Barth., Anthracnose; Cotton.
Macrophoma boltoniae Dearn.; Cotton.
Phoma boltoniae Dearn.; Cotton.
Septoria erigerontis var. *boltoniae* Webber, Leaf spot; Muskogee.
 B. **LATISQUAMA** A. Gray, VIOLET BOLTONIA.
Septoria erigerontis var. *boltoniae* Webber, Leaf spot; Craig.

BOUTELOUA

B. **CURTIPENDULA** (Michx.) Torr., SIDE-OATS GRAMA.
Ascochyta sp., Leaf spot; Payne.
Phyllachora boutelouae Rehm, Black spot; Payne.
Puccinia bartholomaei Diet., Rust; Carter, Okfuskee, Payne, Stephens.
Puccinia boutelouae (Jennings) Holw., Rust; Carter, Osage, Pawnee, Payne.
Puccinia vexans Farl., Rust; Woodward.
Sclerotium bataticola Taub., Charcoal rot; Oklahoma.
Septoria sp., Leaf spot; Woodward.
Stagonospora arenaria Sacc., Leaf spot; Payne.
 B. **GRACILIS** (HBK.) Lag., BLUE GRAMA.
Ascochyta sp., Leaf spot; Payne.
Claviceps purpurea (Fr.) Tul., Ergot; Payne.
Septoria sp., Leaf spot; Payne.
Ustilago boutelouae Kell. & Swingle, Smut; Garfield, Kiowa, Osage, Payne, Woodward.

BOUTELOUA—Continued.

- B. HIRSUTA Lag., HAIRY GRAMA.
Ustilago boutelouae Kell. & Swingle, Smut; Payne.
- B. RIGIDISETA (Steud.) Hitchc., TEXAS GRAMA.
Ascochyta sp., Leaf spot; Payne.

BRASSICA

- B. JUNCEA (L.) Cosson, MUSTARD.
Albugo candida (Pers. ex Lev.) Kuntze, White rust; Payne, Seminole.
Erwinia carotovora (Jones) Winslow et al., Soft rot; Oklahoma.
- B. OLERACEA var. BOTRYTIS L., CAULIFLOWER.
Alternaria circinans (Berk. & Curt.) Bolle, Black leaf spot; Payne.
Xanthomonas campestris (Pam.) Dowson, Black rot; general with collections from Alfalfa, Tulsa.
- B. OLERACEA var. CAPITATA L., CABBAGE.
Alternaria circinans (Berk. & Curt.) Bolle, Black leaf spot; McCurtain, McIntosh, Payne, Tulsa.
Erwinia carotovora (Jones) Winslow et al., Soft rot; general with collection from Seminole.
Fusarium oxysporum f. *conglutinans* (Wr.) Snyder & Hansen, Yellows; general with collections from Cleveland, Kay, Lincoln, Logan, Muskogee, Payne, Seminole.
Heterodera marioni (Cornu) Goodey, Root knot; Oklahoma.
Peronospora parasitica (Pers.) Fr., Downy mildew; McCurtain, McIntosh, Muskogee, Tulsa.
Phoma lingam (Tode) Desm., Black leg; Payne, Seminole.
Plasmodiophora brassicae Wor., Club root.
Xanthomonas campestris (Pam.) Dowson, Black rot; general with collections from McIntosh, Payne, Seminole.
- B. RAPA L. TURNIP.
Albugo candida (Pers. ex Lev.) Kuntze, White rust.
Cercospora albomaculans (Ell. & Ev.) Sacc., Leaf spot; general with collection from Payne.
Colletotrichum higginsianum Sacc., Leaf spot; Seminole.
Erwinia carotovora (Jones) et al., Wet rot; Soft rot; Rogers.
Erysiphe polygoni DC., Powdery mildew; Seminole.
Heterodera marioni (Cornu) Goodey, Root knot; Logan, Tulsa.

BRASSICA—Continued.

B. SP.

Albugo candida (Pers. ex Lev.) Kuntze, White rust; Okmulgee.

BROMUS

B. CARINATUS Hook. & Arn., MOUNTAIN BROME.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.

Septoria bromi Sacc., Leaf spot; Payne.

B. CATHARTICUS Vahl, RESCUE BROME.

Erysiphe graminis DC., Powdery mildew; Payne.

Ustilago bullata Berk., Head smut; Alfalfa, Garfield.

B. COMMUTATUS Schrad., HAIRY BROME.

Ascochyta sp., Leaf spot; Payne.

Phomopsis sp., Payne.

Puccinia graminis Pers., Stem rust; Payne.

Puccinia rubigo-vera agropyri (Erikss.) Arth., Leaf rust; Payne.

Septoria bromi Sacc., Leaf spot; Grady, Payne.

B. INERMIS Leyss., SMOOTH BROME.

Ascochyta sp., Leaf spot; Payne.

Helminthosporium leersii Atk., Leaf spot; Payne.

Phylocticta sp., Leaf spot; Payne.

Ustilago bullata Berk., Head smut; Garfield, Oklahoma.

B. PURGANS L., CANADA BROME.

Ascochyta sp., Leaf spot; Comanche.

Cercospora sp., Leaf spot; Payne.

Septoria bromi Sacc., Leaf spot; Payne.

B. SECALINUS L., CHESS BROME.

Puccinia graminis Pers., Stem rust; Payne.

Septoria bromi Sacc., Leaf spot; Canadian, Comanche.

B. TECTORUM L., CHEATGRASS BROME.

Pleospora sp., Leaf spot; Payne.

B. TEXENSIS (Shear) Hitchc., TEXAS BROME.

Septoria bromi Sacc., Leaf spot; Choctaw.

B. SP., BROME.

Septoria nodorum Berk., Glume blotch; Payne.

BROUSSONETIA

B. PAPYRIFERA (L.) Vent., COMMON PAPERMUL-BERRY.

Nectria cinnabarina Tode ex Fr., Dieback; Murray.

BUCHLOE

B. DACTYLOIDES (Nutt.) Engelm., BUFFALOGRASS.

Anguillulina agrostis (Steinburg) Goodey, Gall nematode; Payne, Woodward.

BUCHLOE—Continued.

Cercospora seminalis Ell. & Ev., Seed blight; Payne.
Erysiphe graminis DC., Powdery mildew; Payne.
Helminthosporium turcicum Pass., Leaf blight; Payne.
Phyllachora boutelouae Rehm, Black spot; Payne.
Puccinia kansensis Ell. & Barth., Rust; Payne.

BUMELIA

B. **LANUGINOSA** (Michx.) Pers., GUM BUMELIA:
 WOOLYBCKET BUMELIA.
Phyllosticta bumeliifolia Heald & Wolf, Leaf spot;
 Adair, Cherokee, Kingfisher, Murray, Muskogee,
 Payne, Pittsburg.

BUXUS

B. **SEMPERVIRENS** L., COMMON BOX.
Phoma conidiogena Schnegg, Leaf tip blight;
 Oklahoma.

CACALIA

C. **TUBEROSA** Nutt., INDIAN PLANTAIN.
Septoria cacaliae Ell. & Kell., Leaf spot; Pawnee.

CALAMOVILFA

C. **GIGANTEA** (Nutt.) Scribn. & Merr., BIG SANDREED.
Ascochyta sp., Anthracnose; Payne.
Puccinia amphigena Diet., Rust; Logan, Woods.
 C. **LONGIFOLIA** (Hook.) Scribn., PRAIRIE SANDREED.
Puccinia amphigena Diet., Rust.

CALLICARPA

C. **AMERICANA** L., AMERICAN BEAUTYBERRY:
 FRENCH MULBERRY.
Cercospora callicarpae Cke., Leaf spot; Le Flore, Payne.
 C. **DICHOTOMA** (Lour.) K.Koch, PURPLE BEAUTY-
 BERRY.
Didymella sp.; Payne.

CALLIRHOE

C. **DIGITATA** Nutt., FINGER POPPYMALLOW.
Puccinia schedonnardi Kell. & Swingle, Rust.
 C. **INVOLUCRATA** (T. & G.) Gray, LOW POPPYMALLOW.
Endophyllum tuberculatum (Ell. & Kell.) Arth. &
 Fromme, Rust; Cleveland.
Phyllosticta sp., Leaf spot; Murray.
Puccinia schedonnardi Kell. & Swingle, Rust.

CALLISTEPHUS

C. CHINENSIS (L.) Nees, COMMON CHINA-ASTER.
Rhizoctonia solani Kuhn, Root rot; Muskogee.

CAMELINA

C. MICROCARPA Andr., LITTLEPOD FALSEFLAX.
Albugo candida (Pers. ex Lev.) Kuntze, White rust;
Garfield, Logan.

C. SATIVA (L.) Crantz, BIGSEED FALSEFLAX.
Albugo candida (Pers. ex Lev.) Kuntze, White rust;
Kingfisher.

CAMELLIA

C. JAPONICA L., COMMON CAMELLIA.
Hendersonia maculans (Cda.) Lev.; Oklahoma.
Macrosporium camelliae Cke. & Mass., Leaf spot;
Oklahoma.

CANNA

C. INDICA L., INDIA CANNA.
Bacterium cannae Bryan, Bacterial bud blight; Beck-
ham.

CAPSELLA

C. BURSA-PASTORIS (L.) Medic., SHEPHERDSPURSE.
Albugo candida (Pers. ex Lev.) Kuntze, White rust;
Kay, Logan, Payne.
Peronospora parasitica (Pers.) Fr., Downy mildew;
Payne.

CAPSICUM

C. FRUTESCENS L., PEPPER.

Alternaria solani (Ell. & Mart.) Jones & Grout, Fruit
rot; general with collections from Payne, Woodward.
Bacterium solanacearum E. F. Sm., Bacterial wilt;
Payne.

Cercospora capsici Heald & Wolf, Leaf & fruit spot;
Creek, Tulsa.

Fusarium sp., Fruit rot; general with collections from
Payne, Woodward.

Glomerella cingulata (Ston.) Spauld. & Schrenk,
Anthracnose; Payne.

Xanthomonas vesicatoria (Doidge) Dowson, Bacterial
leaf spot; Payne, Tulsa.

Solanum virus 2, Mosaic; Payne.

CARAGANA

C. ARBORESCENS Lam., SIBERIAN PEASHRUB.
Agrobacterium rhizogenes (Riker et al.) Conn, Hairy root.

CAREX

C. BICKNELLII Britton, BICKNELL SEDGE.
Puccinia extensicola erigerontis Arth., Rust.
 C. GRAVIDA Bailey.
Colletotrichum sp.
 =(*Vermicularia caricina* (Ell. & Ev.), Anthracnose;
 Cimarron.
Puccinia extensicola erigerontis Arth., Rust; Kiowa.
 C. VULPINOIDEA Michx., FOX SEDGE.
Puccinia extensicola erigerontis Arth., Rust.

CARPINUS

C. CAROLINIANA Walt., AMERICAN HORNBEAM.
Pezicula carpinea (Pers.) Tul., Bark canker; McCurtain.
Phyllosticta sp., Leaf spot; Delaware.

CARTHAMUS

C. TINCTORIUS L., SAFFFLOWER.
Septoria sp., Leaf spot; Payne.

CARYA

C. ALBA (L.) K.Koch, MOCKERNUT HICKORY.
Clitocybe parasitica Wilcox, Root rot.
 C. CORDIFORMIS (Wang.) K.Koch, BITTERNUT HICKORY.
Diplodia caryogena Ell. & Ev., Leaf spot; Payne.
Sphaeropsis linearis Pk., Leaf spot; Payne.
 C. GLABRA (Mill.) Sweet, PIGNUT HICKORY.
Gnomonia caryae Wolf, Anthracnose.
 C. ILLINOENSIS (Wang.) K.Koch, PECAN.
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; general with collection from Oklahoma.
Cercospora fusca Rand, Brown leaf spot; Johnston, Muskogee, Payne.
Cercospora halstedii Ell. & Ev., Leaf blotch; Payne.
Cercospora caryigena (Ell. & Ev.) Hohn., Downy spot; Carter, Jefferson, Johnston, Lincoln, Okfuskee, Payne, Tulsa, Washington.
Cladosporium effusum (Wint.) Dem., Scab; Bryan, Carter, Muskogee, Okfuskee, Oklahoma, Okmulgee, Payne, Pottawatomie, Wagoner.

CARYA—Continued.

Elsinoe randii Jenkins & Bit., Nursery blight; Carter, Lincoln, Payne.

Glomerella cingulata (Ston.) Spauld. & Schrenk, Pink rot; Anthracnose; Oklahoma.

Heterodera marioni (Cornu) Goodey, Root knot; Tulsa.

Leptothyrium nervisedum Cole, Vein spot; Carter, Jefferson, Johnston, Muskogee, Washington.

Mycosphaerella caryigena Demaree & Cole, Downy spot; Muskogee, Okmulgee.

Myxosporium sp., Leaf spot; Payne.

Phoma sp., Blight; Grady, Payne.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; general.

Schizophyllum commune Fr., Heart rot; Payne.

Virus, Bunch disease.

Nonparasitic, Rosette; general with collections from Payne, Wagoner.

C. OVATA (Mill.) K. Koch, SHAGBARK HICKORY.
Phyllosticta caryae Pk., Leaf spot; Murray.
Sphaeropsis linearis Pk., Leaf spot; Le Flore.

C. TEXANA C. DC., BLACK HICKORY: BITTER PECAN.
Microstroma juglandis (Bereng.) Sacc., Leaf spot; Payne.

CASTANEA

C. PUMILA (L.) Mill., ALLEGANY CHINKAPIN.
Marssonina ochroleuca (B. & C.) Humph., Leaf spot; Payne.
Phytophthora cambivora (Petri) Buis., Root rot; Le Flore.

C. SP., CHESTNUT.
Marssonina ochroleuca (B. & C.) Humph., Leaf spot; Payne.

CATALPA

C. BIGNONIOIDES Walt., SOUTHERN CATALPA.
Cercospora catalpae Wint., Leaf spot; Stephens.

C. SPECIOSA Warder, NORTHERN CATALPA.
Alternaria catalpae (Ell. & Mart.) Parker, Leaf spot; Payne.
Heterodera marioni (Cornu) Goodey, Root knot; Tulsa.
Phyllosticta catalpae Ell. & Mart., Leaf spot; Payne.
Sclerotium bataticola Taub., Charcoal rot; Payne.
Sporidesmium capsularum Thum.; Payne.

CELOSIA

- C. ARGENTEA L., FEATHER COCKSCOMB.
Cercospora celosiae Sydow, Leaf spot; Payne.
- C. SP., COCKSCOMB,
Fusarium sp., Wilt; Garfield, Kiowa.

CELTIS

- C. OCCIDENTALIS L., COMMON HACKBERRY.
Cercospora celtidis (Ell. & Kell.) Davis, Leaf spot; Oklahoma, Payne.
Cylindrosporium defoliatum Heald & Wolf, Leaf blight; Payne.
Phyllosticta celtidis Ell. & Ev., Leaf spot; Payne.
Phytophthora omnivorum (Shear) Dug., Root rot.
Valsa celtidis Cke., Wood rot; Payne.
- C. RETICULATA Torr., NETLEAF HACKBERRY.
Cylindrosporium defoliatum Heald & Wolf, Leaf spot; Payne.
- C. SPP., HACKBERRY.
Stereum purpureum Pers. ex Fr., Silver leaf.
Uncinula parvula Cke. & Pk., Powdery mildew; Payne.

CENCHRUS

- C. PAUCIFLORUS Benth., MAT SANDBUR.
Puccinia cenchri Diet. & Holw., Rust.
Sorosporium syntherismae (Pk.) Farl., Smut; Texas, Woodward.

CENTAUREA

- C. AMERICANA Nutt., BASKETFLOWER CENTAUREA.
Puccinia irregulata Jacks., Rust; McCurtain, Murray.
Septoria centaureicola var. *brevispora* Pk., Leaf spot; Murray.
- C. CYANUS L., CORNFLOWER.
Septoria cyani Holl., Leaf spot; Payne.

CEPHALANTHUS

- C. OCCIDENTALIS L., COMMON BUTTONBUSH.
Cercospora perniciosa Heald & Wolf, Leaf blight.
Ramularia cephalanthi Ell. & Kell., Leaf spot; Payne.

CERATOSTIGMA

- C. PLUMBAGINOIDES Bunge, BLUE CERATOSTIGMA.
Phyllosticta larpentae Tassi, Leaf spot; Payne.

CERCIS

C. CANADENSIS L., EASTERN REDBUD.
Alternaria sp., Leaf spot; Delaware, Payne.
Cercospora cercidis Ray, Leaf spot; McCurtain, Murray,
 Muskogee, Payne.
Discosia artocreas Tode ex Fr., Leaf spot; Murray,
 Payne.
Mycosphaerella cercidicola (Ell. & Kell.) Wolf, Leaf
 spot; Payne.
Pestalotia sp., Leaf spot; Murray, Payne.
Phyllosticta cercidicola Ell. & Ev., Leaf spot; Payne.

CHAENOMELES

C. LAGENARIA (Lois.) Koidz., FLOWERINGQUINCE.
Fusicladium pirinum (Lib.) Fckl., Scab; Tulsa.

CHEIRANTHUS

C. CHEIRI L., COMMON WALLFLOWER.
Heterosporium sp., Leaf spot; Payne.

CHENOPODIUM

C. ALBUM L., LAMBSQUARTERS GOOSEFOOT.
Cercospora dubia (Riess) Wint., Leaf spot; Payne.
Peronospora effusa (Grev.) Rabh., Downy mildew;
 Payne.
Puccinia aristidae Tr., Rust; McCurtain.
 C. HYBRIDUM L., MAPLELEAF GOOSEFOOT.
Cercospora anthemintica Atk., Leaf spot; Payne.
Cercospora dubia (Riess) Wint., Leaf spot; Payne.
 C. SP., GOOSEFOOT.
Peronospora sp., Downy mildew; Payne.

CHIONANTHUS

C. VIRGINICA L., WHITE FRINGETREE.
Cercospora chionanthi Ell. & Ev., Leaf spot; Payne.

CHLORIS

C. VERTICILLATA Nutt., TUMBLE WINDMILLGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Muskogee.
Puccinia chloridis Speg., Leaf rust; Payne.

CHRYSANTHEMUM

- C. FRUTESCENS, MARGUERITE CHRYSANTHEMUM.
Septoria sp., Leaf spot; Payne.
- C. MAXIMUM Ram., PYRENEES CHRYSANTHEMUM.
Cercospora chrysanthemi Heald & Wolf, Leaf spot; Payne.
- C. MORIFOLIUM Ram., FLORISTS CHRYSANTHEMUM.
Puccinia chrysanthemi Roze, Rust; Payne.
- C. SPP., CHRYSANTHEMUM.
Alternaria sp., Leaf blight; Oklahoma.
Erwinia carotovora (Jones) Winslow et al., Soft rot; Oklahoma.
Fusarium oxysporum f. *conglutinans* (Wr.) Snyder & Hansen, Wilt; Garfield, Payne.
Fusarium spp., Root rot; Garfield, Oklahoma, Okmulgee, Payne.
Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Craig, Oklahoma.
Puccinia chrysanthemi Roze, Rust; general.
Sclerotium bataticola Taub., Charcoal rot; Payne.
Septoria chrysanthemella Sacc., Leaf spot; Oklahoma.
Septoria macrosporia Dearn., Leaf spot; Oklahoma.

CHRYOPSIS

- C. BERLANDIERI Greene, GOLDASTER.
Puccinia grindeliae Peck, Rust.

CICUTA

- C. MACULATA L., SPOTTED WATERHEMLOCK.
Coniothyrium sp.; Murray.
Macrosporium commune Rabh., Murray.
Phyllosticta sp., Leaf spot; Murray.

CIRSIUM

- C. DISCOLOR (Muhl.) Spreng., FIELD THISTLE.
Puccinia cirsii Lasch, Rust.
- C. UNDULATUM var. MEGACEPHALUM (A.Gray) Fern., THISTLE.
Albugo tragopogonis (Pers.) S.F.Gray, White rust; Payne.
Puccinia cirsii Lasch, Rust.
Puccinia obtegens (Link) Tul., Rust; Payne.

CISSUS

- C. INCISA (Nutt.) Desmoul., IVY TREEBINE.
Aecidium mexicanum D.& H., Rust; Southern Oklahoma..

CITRULLUS

C. VULGARIS Schrad., WATERMELON.

Colletotrichum lagenarium (Pass.) Ell. & Halst., Anthracnose; general with collections from Okfuskee, Oklahoma, Payne,, Seminole.

Diplodia sp., *Diplodia* rot.

Erwinia tracheiphila (E. F. Sm.) Holland, Bacterial wilt; Delaware, Lincoln, Seminole, Tulsa.

Fusarium oxysporum f. *niveum* (E.F.Sm.) Snyder & Hansen, Fusarium wilt; Beckham, Cherokee, Choctaw, Ellis, Grady, Grant, Haskell, Logan, Okfuskee, Oklahoma, Pittsburg, Tulsa, Washita.

Fusarium sp., Damping off; Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Logan.

Macrosporium cucumerinum Ell. & Ev., Leaf blight; Seminole.

Pythium sp., Damping off; Tulsa.

CITRUS

C. PARADISI Macfad., GRAPEFRUIT.

Glomerella cingulata (Ston.) Spauld. & Schrenk, Anthracnose; Canadian.

Penicillium digitatum Sacc., Green mold; Canadian.

C. TRIFOLIATA L., HARDY ORANGE.

Diplodia natalensis Pole-Evans, Dieback; Payne.

CLADRASTIS

C. LUTEA (Michx.) Koch, AMERICAN YELLOWWOOD.

Botryosphaeria ribis (Tode ex Fr.) Gross. & Dug., Dieback; Adair.

Phyllactinia corylea Pers. ex Karst., Powdery mildew; Payne.

CLEMATIS

C. PITCHERI T. & G., PITCHERS CLEMATIS.

Cercospora squalidula Pk., Leaf spot; Payne.

C. VIRGINIANA L., VIRGINSOWER.

Cercospora squalidula Pk., Leaf spot; Payne.

Cladosporium sp., Leaf spot; Payne.

C. SP., CLEMATIS.

Puccinia rubigo-vera agropyrina (Erikss.) Arth., Rust; McCurtain.

CLEOME

- C. LUTEA Hook., YELLOW SPIDERFLOWER.
Cercospora conspicua Earle, Leaf spot; Payne.
- C. SERRULATA Pursh, BEE SPIDERFLOWER.
Cercospora conspicua Earle, Leaf spot; Woods.

CNIDOSCOLUS

- C. TEXANUS (Muell. Arg.) Small, TEXAS TREAD-SOFTLY.
Septoria jatrophae Heald & Wolf, Leaf spot; Payne.

COCCULUS

- C. CAROLINUS (L.) DC., CAROLINA MOONSEED: CAROLINA SNAILSEED.
Cercospora cocculicola Ray, Leaf spot; Payne, Pittsburgh.
Cercospora menispermi E. & H., Leaf spot.
Phyllosticta sp., Leaf spot; Payne.

COLEUS

- C. SP., COLEUS.
Heterodera marioni (Cornu) Goodey, Root knot; Craig, Payne.

COLUTEA

- C. ARBORESCENS L., COMMON BLADDERSENNA.
Ganoderma sp., Root rot.

COMANDRA

- C. UMBELLATA (L.) Nutt., COMMON COMANDRA.
Cuscuta arvensis Beyrich, Dodder; Caddo.

COMMELINA

- C. VIRGINICA L., VIRGINIA DAYFLOWER.
Phyllosticta sp., Leaf spot; Payne.

CONVOLVULUS

- C. ARVENSIS L., EUROPEAN GLORYBIND: FIELD BINDWEED.
Cercospora tuberculella J.J.Davis, Leaf spot; Payne.
Puccinia convolvuli (Pers.) Cast., Rust; Payne.
Septoria convolvuli Desm., Leaf spot; Payne.

COREOPSIS

- C. GRANDIFLORA Hogg, BIGFLOWER COREOPSIS.
Cercospora coreopsisid Ray, Leaf spot; Payne.
- C. TINCTORIA Nutt., PLAINS COREOPSIS.
Cuscuta cuspidata Engelm., Dodder.
- C. VERTICILLATA L., THREADLEAF COREOPSIS.
Cuscuta arvensis Beyrich, Dodder; Muskogee.
Cuscuta cuspidata Engelm., Dodder; Comanche.
Cuscuta indecora Choisy, Dodder; Carter.

CORNUS

- C. ASPERIFOLIA Michx., ROUGHLEAF DOGWOOD.
Alternaria sp., Leaf spot; Payne.
Septoria cornicola Desm., Leaf spot; Payne.
- C. STOLONIFERA Michx., REDOSIER DOGWOOD.
Cylindrosporium sp., Leaf spot; Payne.
Septoria cornicola Desm., Leaf spot; Payne.

CORYDALIS

- C. SP., CORYDALIS.
Peronospora corydalidis DeBy., Downy mildew; Payne

CORYLUS

- C. AMERICANA Marsh., AMERICAN FILBERT.
Cercospora corylina Ray, Leaf spot; Payne.
- C. CORNUTA Marsh., BEAKED FILBERT.
Cercospora corylina Ray, Leaf spot; Payne.

COTINUS

- C. COGGYGRIA Scop., COMMON SMOKETREE.
Macrophoma sp., Dieback; Payne.

CRATAEGUS

- C. VIRIDIS L., GREEN HAWTHORN.
Gymnosporangium globosum Farl., Hawthorn rust; Payne.
- C. SPP., HAWTHORN.
Armillaria mellea Vahl ex Fr., Root rot.
Gymnosporangium globosum Farl., Hawthorn rust; general with collections from Payne, Tulsa.
Gymnosporangium spp., Rust; Atoka, Le Flore, Mc-Curtain, Payne.
Phyllosticta sp., Leaf spot; Oklahoma.

CROTALARIA

- C. **SPECTABILIS** Roth, SHOWY CROTALARIA.
Ascochyta pisi Lib., Anthracnose; Payne.
- C. **SPP., CROTALARIA.**
Fusarium sp., Wilt; Payne.
Sclerotium bataticola Taub., Charcoal rot; Payne.

CROTON

- C. **CAPITATUS** Michx., WOOLY CROTON.
Bubakia crotonis (Cke.) Arth., Rust; Comanche, Kay.
- C. **MONANTHOGYNUS** Michx., SINGLE FRUITED CROTON.
Bubakia crotonis (Cke.) Arth., Rust; Comanche, Muskogee, Osage, Payne.
- C. **TEXENSIS** (Klotzsch) Muell. Arg., TEXAS CROTON.
Bubakia crotonis (Cke.) Arth., Rust; Payne.

CUCUMIS

- C. **MELO** L., MUSKMELON.
Aspergillus sp., Fruit rot; Payne.
Colletotrichum lagenarium (Pass.) Ell.& Halst., Anthracnose; general.
Erwinia carotovora (Jones) Winslow et al., Soft rot; Payne.
Erwinia tracheiphila (E.F.Sm.) Holland, Bacterial wilt; Haskell, Muskogee, Okfuskee, Seminole, Woodward.
Fusarium oxysporum f. *niveum* (E.F.Sm.) Snyder & Hansen, Fusarium wilt.
Fusarium sp., Fruit rot; Payne.
Heterodera marioni (Cornu) Goodey, Root knot; Beckham, Logan.
Macrosporium cucumerinum Ell.& Ev., Leaf blight; Okfuskee, Payne, Woodward.
Penicillium sp., Fruit rot; Payne.
Pseudoperonospora cubensis (Berk.& Curt.) Rostew., Downy mildew; Okfuskee, Oklahoma, Okmulgee.
Virus, Cucumber mosaic.
- C. **SATIVUS** L., CUCUMBER.
Cladosporium cucumerinum Ell.& Arth., Scab.
Colletotrichum lagenarium (Pass.) Ell.& Halst.. Anthracnose.
Erwinia tracheiphila (E.F.Sm.) Holland, Wilt; Le Flore, Muskogee, Seminole, Tulsa.
Erysiphe cichoracearum DC., Powdry mildew; Oklahoma, Texas.
Fusarium sp., Wilt; Le Flore, Oklahoma.

CUCUMIS—Continued.

Heterodera marioni (Cornu) Goodey, Root knot; Custer, Seminole.
Macrosporium cucumerinum Ell. & Ev., Leaf blight; Seminole, Tulsa.
Pseudomonas lachrymans (E.F.Sm. & Bryan) Ferraris, Angular leaf spot; Seminole.
Pseudoperonospora cubensis (Berk. & Curt.) Rostew, Downy mildew; Adair, Payne, Tulsa.
Virus, Cucumber mosaic; Oklahoma, Payne.

CUCURBITA

C. FOETIDISSIMA HBK., BUFFALOGOURD: MISSOURI GOURD.
Cercospora cucurbitae Ell. & Ev.; Noble.
Erysiphe cichoracearum DC., Powdery mildew; Cleveland.
C. MAXIMA Duchesne, WINTER SQUASH.
Choenephora cucurbitarum (Berk. & Rav.) Thaxter, Blossom blight; Payne.
Erysiphe cichoracearum DC., Powdery mildew; Oklahoma, Payne.
Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Harmon, Lincoln.
Virus, Cucumber mosaic; Payne.
C. MOSCHATA Duchesne, CUSHAW.
Choenephora cucurbitarum (Berk. & Rav.) Thaxter, Blossom blight; Payne.
C. PEPO L., PUMPKIN.
Erysiphe cichoracearum DC., Powdery mildew; Payne.

CUNNINGHAMIA

C. LANCEAOLATA Hook., COMMON CHINAFIR.
Cercospora sp., Leaf spot; Grady.

CYAMOPSIS

C. TETRAGONOLOBA (L.) Taub., GUAR.
Rhizoctonia solani Kuhn, Root rot; Payne.
Virus, Mosaic; Payne.

CYCAS

C. SP., CYCAS.
Heterodera marioni (Cornu) Goodey, Root knot; Payne.

CYCLAMEN

C. SP., CYCLAMEN.
Cladosporium cyclaminis Massey & Tilford, Cyclamen stunt; Lincoln, Logan, Muskogee, Tulsa.
Heterodera marioni (Cornu) Goodey, Root knot; Logan.

CYDONIA

C. OBLONGA Mill., COMMON QUINCE.

Entomosporium maculatum Lev., Leaf blight; Washington.

Erwinia amylovora (Burr.) Winslow, Fire blight; general.

Fabraea maculata (Lev.) Atk., Leaf blight; Washington.

Gymnosporangium clavipes Cke. & Pk., Orange rust; Tulsa.

CYNODON

C. DACTYLON (L.) Pers., BERMUDAGRASS.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne, Seminole.

Coniosporium rhizophilum (Preuss) Sacc., Mold, Okfuskee.

Helminthosporium cynodontis Mariognoni, Leaf spot; Payne, Seminole, Tulsa.

Helminthosporium giganteum Heald & Wolf, Leaf spot; Hughes, Muskogee, Okmulgee, Payne, Seminole.

Helminthosporium sp., Leaf spot; Payne, Tulsa.

Mucilago spongiosa (Leyss.) Morg., Smothering; Garvin, Lincoln, Payne.

Physarum cinereum (Batsch) Pers., Smothering; Garvin, Payne.

Piricularia grisea (Cke.) Sacc., Leaf spot; Payne.

Puccinia cynodontis Lacr., Rust; Payne.

Rhizoctonia sp., Root rot; Payne.

Sclerospora farlowii Grif., Downy mildew; Payne.

Septoria sp., Leaf spot.

Ustilago cynodontis Henn., Loose smut; Canadian, Nowata, Oklahoma, Payne, Seminole, Wagoner.

CYPERUS

C. ESCULENTUS L., CHUFA FLATSEDGE.

Puccinia canaliculata (Schw.) Lagerh., Rust; Muskogee, Payne.

C. FILICULMIS Vahl, SLENDER FLATSEDGE.

Puccinia cyperi Arth., Rust; Logan, Payne.

C. PSEUDOVEGETUS Steud., SEDGE.

Puccinia cyperi Arth., Rust.

C. ROTUNDUS L., NUTGRASS FLATSEDGE.

Puccinia canaliculata (Schw.) Lagerh., Rust; Payne.

C. SCHWEINITZI Torr., SCHWEINITZ FLATSEDGE.

Puccinia cyperi Arth., Rust.

CYPERUS—Continued.

- C. STRIGOSUS L., STRAW-COLORED FLATSEDGE.
Puccinia canaliculata (Schw.) Lagerh., Rust; Oklahoma.
- C. SPP.
Puccinia canaliculata (Schw.) Lagerh., Rust; Creek, Payne.
Puccinia cyperi Arth., Rust, Noble.

DACTYLIS

- D. GLOMERATA L., ORCHARDGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.
Phyllachora sp., Black spot; Payne.
Puccinia graminis Pers., Stem rust; Payne.
Scolecotrichum graminis Fckl., Brown stripe; Payne.
Septoria sp., Leaf spot; Payne.
Uromyces dactylidis Otth, Rust; Woodward.

DAHLIA

- D. SPP., DAHLIA
Bacterium solanacearum E.F.Sm., Bacterial wilt.
Cercospora sp., Leaf spot; Le Flore.
Fusarium sp., Wilt; Oklahoma.
Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Carter, Oklahoma.
Penicillium sp., Storage rot; Oklahoma.
Vermicularia compacta Cke.& Ell., Anthracnose; Tulsa.
Virus, Dahlia mosaic; Payne.

DALEA

- D. ENNEANDRA Nutt., SLENDER DALEA.
Puccinia andropogonis onobrychidis (Burr.) Arth., Rust; Payne.

DATURA

- D. METELOIDES DC., SACRED DATURA.
Alternaria crassa (Sacc.) Rands, Leaf spot; Payne.
- D. STRAMONIUM L., JIMSONWEED DATURA.
Alternaria crassa (Sacc.) Rands, Leaf spot; Payne.
Cercospora daturicola (Speg.) Ray, Leaf spot; Logan.

DAUCUS

- D. CAROTA L., CARROT.
Erwinia carotovora (Jones) Winslow et al., Soft rot.
Heterodera marioni (Cornu) Goodey, Root knot; Caddo, Ellis, Oklahoma, Payne, Pottawatomie.

DELPHINIUM

D. SPP., LARKSPUR.

Erysiphe polygoni DC., Powdery mildew; Payne.
Fusarium sp., Root rot; Tulsa.

DESCURAINIA

D. PINNATA (Walt.) Britton, PINNATE TANSY-MUSTARD.

Albugo candida (Pers. ex Lev.) Kuntze, White rust; Caddo.

D. RICHARDSONII ssp. INCISA (Engelm.) Detling, TANSY-MUSTARD.

Peronospora parasitica (Pers.) Fr., Downy mildew; Payne.

Septoria sisymbrii Ell., Leaf spot; Payne.

DESMODIUM

D. CANESCENS (L.) DC., HOARY TICKCLOVER.

Cercospora desmodiicola Atk., Leaf spot; Payne.

D. MARILANDICUM (L.) DC., MARYLAND TICKCLOVER.
Parodiella perisporioides (Berk. & Curt.) Speg., Black spot; Le Flore.D. PANICULATUM (L.) DC., PANICLED TICKCLOVER.
Tuberculina flavogranulata Dearn. & Barth., Parasitic on *Uromyces hedsari-paniculati* (Schw.) Farl., on living leaves; Le Flore.

Uromyces hedsari-paniculati (Schw.) Farl., Rust; Le Flore.

D. SESSILIFOLIUM (Torr.) T. & G., SESSILE TICKCLOVER.

Uromyces hedsari-paniculati (Schw.) Farl., Rust.

D. SP., TICKCLOVER.

Cercospora desmodii Ell. & Kell., Leaf spot; Payne.

DEUTZIA

X D. LEMOINEI Lemoine, LEMOINE DEUTZIA.

Cercospora deutziae Ell. & Ev., Leaf spot; Payne.

DIANTHERA

D. AMERICANA L., AMERICAN DIANTHERA.

Cercospora dianthrae Ell. & Kell., Leaf spot; Murray.

D. OVATA Walt., DIANTHERA.

Cercospora dianthrae Ell. & Kell., Leaf spot; Comanche.

DIANTHUS

D. CARYOPHYLLUS L., CARNATION.

Fusarium spp., Dieback; Oklahoma, Payne, Pontotoc.
Heterodera marioni (Cornu) Goodey, Root knot; Oklahoma.
Pseudomonas woodsii (E.F.Sm.) Stapp, Bacterial spot.
Uromyces caryophyllinus (Schr.) Wint., Rust; general with collection from Payne.
Virus, Carnation mosaic; Kay.

DIARRHENA

D. AMERICANA Beauv., AMERICAN BEAKGRAIN.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.

DIEFFENBACHIA

D. PICTA Schott, VARIABLE TUFTROOT.

Gloeosporium minutum, Anthracnose; Payne.

DIGITARIA

D. FILIFORMIS (L.) Koel., SLENDER FINGERGRASS.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Osage.

D. SANGUINALIS (L.) Scop., HAIRY CRABGRASS.

Piricularia grisea (Cke.) Sacc., Leaf spot; Payne.
Sorosporium syntherismae (Pk.) Farl., Smut; Payne.
Ustilago rabenhorstiana Kuhn, Flower smut; Payne.

DIODIA

D. TERES Walt., ROUGH BUTTONWEED.

Cercospora diodiae Cke., Leaf spot; Payne.
Uromyces spermatozoides (Schw.) Curt., Rust; Haskell, Le Flore, Lincoln, Pawnee, Payne.

DIOSPYROS

D. KAKI L. f., JAPANESE PERSIMMON.

Cercospora fuliginosa Ell. & Kell., Black leaf spot.
Leptothyrium pomi (Mont. & Fr.) Sacc.; Bryan.

D. VIRGINIANA L., COMMON PERSIMMON.

Cercospora diospyri Thum., Leaf spot; Osage.
Nonparasitic, Black leaf spot; general with collections from Osage, Payne, Seminole.

DISTICHLIS

- D. SPICATA (L.) Greene, SEASHORE SALTGRASS.
Endodothella tracyi (Ell. & Ev.) Theiss. & Syd.
Phyllachora diplocarpa Ell. & Ev., Black spot; Kiowa.
Puccinia aristidae Tracy, Rust.
- D. STRICTA (Torr.) Rydb., INLAND SALTGRASS.
Puccinia aristidae Tracy, Rust; Payne.

DODECATHEON

- D. MEADIA L., COMMON SHOOTINGSTAR.
Coniothyrium sp.; Delaware.

DRACAENA

- D. FRAGRANS Ker, FRAGRANT DRACAENA.
Gloeosporium polymorphum Tunchili, Anthracnose;
 Payne.

ECHINACEA

- E. ANGUSTIFOLIA DC., BLACKSAMSON ECHINACEA.
Metasphaeria sp.; Murray.

ECHINOCHLOA

- E. CRUSGALLI (L.) Beauv., BARNYARDGRASS.
Coletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Payne.
Puccinia flaccida B. & Br., Rust.
Ustilago crus-galli Tracy & Earle, Smut.

ELAEAGNUS

- E. ANGUSTIFOLIA L., RUSSIANOLIVE.
Alternaria sp.; Payne.
Cercospora elaeagni Heald & Wolf, Leaf spot; Oklahoma, Payne.
Cytospora elaeagni Allesch., Canker.
Phylosticta argyrea Speg., Leaf spot; Payne.
- E. COMMUTATA Bernh., SILVERBERRY.
Cercospora elaeagni Heald & Wolf, Leaf spot; Payne.

ELEOCHARIS

- E. OBTUSA (Willd.) Schultes, BLUNT SPIKESEDGE.
Puccinia eleocharidis Arth., Rust.
- E. TENUIS (Willd.) Schultes, SLENDER SPIKESEDGE.
Puccinia eleocharidis Arth., Rust.

ELEPHANTOPUS

E. CAROLINIANUS Raeusch., ELEPHANTSFOOT.
Coleosporium elephantopodis (Schw.) Thum., Rust;
 Le Flore, Ottawa, Payne.

ELEUSINE

E. INDICA (L.) Gaertn., GOOSEGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Payne.

ELLISIA

E. NYCTELEA L., MACROCALYX.
Puccinia rubigo-vera apocrypta (Ell. & Tr.) Arth., Rust.

ELYMUS

E. CANADENSIS L., CANADA WILDRYE.
Ascochyta elymi Tehon & Daniels, Leaf spot; Payne.
Claviceps purpurea (Fr.) Tul., Ergot; general with collections from Payne, Washita.
Glomerella sp., Leaf spot; Payne.
Puccinia graminis Pers., Stem rust; Payne, Woodward.
Puccinia rubigo-vera impatientis (Arth.) Mains, Rust; Logan.
Septoria elymi Ell. & Ev., Leaf spot; Woodward.

E. GLAUCUS Buckl., BLUE WILDRYE.
Puccinia graminis Pers., Stem rust; Payne.

E. JUNCEUS Fisch., RUSSIAN WILDRYE.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.

E. VILLOSUS Muhl., HAIRY WILDRYE.
Ophiobolus cariceti (B. & Br.) Sacc.; Payne.

E. VIRGINICUS L., VIRGINIA WILDRYE.
Claviceps purpurea (Fr.) Tul., Ergot; Payne, Washita.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Cleveland.
Puccinia graminis Pers., Stem rust; Payne.
Puccinia rubigo-vera agropyrina (Erikss.) Arth., Leaf rust.
Puccinia rubigo-vera impatientis (Arth.) Mains, Rust; Woodward.
Urocystis agropyri (Preuss.) Schroet., Smut.
Ustilago striaeformis (Westend.) Niessl, Smut; Payne.

EPIDENDRUM

E. SP., ORCHID.

Rhizoctonia solani Kuhn, Root rot; Oklahoma.

ERAGROSTIS

E. PECTINACEA (Michx.) Steud., CAROLINA LOVE-GRASS.
Uromyces eragrostidis Tracy, Rust.

E. PILOSA (L.) Beauv., INDIA LOVEGRASS.
Puccinia eragrostidis Tracy, Rust; Payne.

E. SECUNDIFLORA Presl, RED LOVEGRASS.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Cleveland.

E. SPECTABILIS (Pursh) Steud., PURPLE LOVEGRASS.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Uromyces eragrostidis Tracy, Rust; Logan.

E. TRICHODES (Nutt.) Wood, SAND LOVEGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.

EREMOCHLOA

E. OPHIUROIDES (Munro) Hack., CENTIPEDEGRASS.
Curvularia geniculata (Tracy & Earle) Boedijn; Payne.

ERIGERON

E. CANADENSIS L., HORSEWEED FLEABANE.
Cuscuta cuspidata Engelm., Dodder; Pittsburg.
Puccinia cyperi Arth., Rust; Haskell, Payne.
Septoria erigerontis Pk., Leaf spot; Payne.

E. STRIGOSUS Muhl., DAISY FLEABANE.
Cercosporaella cana (Pass.) Sacc., Leaf spot; Delaware.
Puccinia cyperi Arth., Rust; Muskogee, Payne.
Puccinia extensicola erigerontis Arth., Rust.
Septoria erigerontis Pk., Leaf spot; Payne.
Virus, Aster yellows; Payne.

EUCHLAENA

E. SP., TEOSINTE.

Ustilago zaeae (Beck) Ung., Smut; Payne.

EUONYMUS

E. FORTUNEI var. VEGETUS Rehd., BIGLEAF WINTER-CREEPER EUONYMUS.
Phomopsis foveolaris (Fr.) Trav.; Oklahoma.
Phyllosticta euonymi Sacc., Leaf spot; Oklahoma.

EUONYMUS—Continued.

E. SPP., EUONYMUS.

Fusarium sp., Wilt; Oklahoma.*Phyllosticta euonymi* Sacc., Leaf spot; Oklahoma.

EUPATORIUM

E. COELESTINUM L., MISTFLOWER EUPATORIUM.

Puccinia conocephalae Seym., Rust; Payne.

E. SEROTINUM Michx., LATE EUPATORIUM.

Puccinia eleocharidis Arth., Rust.

EUPHORBIA

E. COROLLATA L., FLOWERINGSPURGE EUPHORBIA.

Phyllosticta sp., Leaf spot; Cherokee.

E. DENTATA Michx., TOOTHED EUPHORBIA.

Uromyces proeminens poinsettiae (Tranz.) Arth., Rust; Comanche, Payne.

E. DICTYOSPERMA Fisch. & Mey., RETICULATE-SEEDED EUPHORBIA.

Uromyces dictyosperma Ell. & Ev., Rust; Muskogee.

E. HUMISTRATA Engelm., HAIRY SPREADING EUPHORBIA.

Uromyces proeminens euphorbiicola (Tranz.) Arth., Rust; Pawnee, Payne.

E. MACULATA L., SPOTTED EUPHORBIA.

Cercosporidium euphorbiae (T. & E.) Earle, Leaf spot; Payne.*Uromyces proeminens euphorbiicola* (Tranz.) Arth., Rust; Pawnee, Payne.*Uromyces proeminens typica* Arth., Rust; Pawnee.

E. MARGINATA Pursh, SNOW-ON-THE-MOUNTAIN EUPHORBIA.

Cercospora pulcherrimae Tharp, Leaf spot; Comanche, Payne.*Puccinia panici* Diet., Rust; Payne.*Uromyces proeminens myristica* (B. & C.) Arth., Rust; Payne, Seminole.

E. PULCHERRIMA Willd., COMMON POINSETTIA.

Pythium debaryanum Hesse, Stem rot; Bryan.*Uromyces proeminens poinsettiae* (Tranz.) Arth., Rust.

E. STICTOSPORA Engelm., NARROW-SEEDED EUPHORBIA.

Uromyces proeminens euphorbiicola (Tranz.) Arth., Rust.

FESTUCA

- F. ELATIOR L., MEADOW FESCUE.
Cercospora sp., Leaf spot; Payne.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.
- F. VERSUTA Beal, TEXAS FESCUE.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Comanche.

FICUS

- F. AUREA Nutt., FLORIDA STRANGLER FIG.
Heterodera marioni (Cornu) Goodey, Root knot; Tulsa.
- F. CARICA L., COMMON FIG.
Nectria cinnabarinata Tode ex Fr., Canker; Comanche.
- F. ELASTICA Roxb., INDIARUBBER FIG: RUBBER-PLANT.
Gloeosporium cingulatum Atk., Leaf spot; Osage, Washington.

FIMBRISTYLIS

- F. AUTUMNALIS (L.) R. & S., SLENDER UMBELLED SPIKERUSH.
Cintractia axicola (Berk.) Cornu, Smut; Le Flore.
- F. VAHLII (Lam.) Link. VAHL UMBELLED SPIKERUSH.
Cintractia axicola (Berk.) Cornu, Smut.

FORSYTHIA

- F. INTERMEDIA Zabel, BORDER FORSYTHIA.
Alternaria sp., Leaf spot; Payne.
- F. VIRIDISSIMA Lindl., GREENSTEM FORSYTHIA.
Phyllosticta terminalis Ell. & Mart., Leaf spot; Payne.
- F. SPP., FORSYTHIA.
Polyporus hirsutus Wulf. ex Fr., Wood rot; Payne.
Stereum albobadium (Schw.) Fr., Wood rot; Payne.

FRAGARIA

- F. VIRGINIANA Duchesne, VIRGINIA STRAWBERRY.
Mycosphaerella fragariae (Tul.) Lind., Leaf spot; Payne.
- F. SPP., STRAWBERRY.
Botrytis sp., Gray mold rot; Creek, Seminole.
Dendrophoma obscurans (Ell. & Ev.) H.W. Anderson, Leaf blight; Delaware, Wagoner.
Diplocarpon earliana (Ell. & Ev.) Wolf, Leaf scorch; general with collections from Adair, Caddo, Cherokee, Payne, Pontotoc, Rogers, Seminole.

FRAGARIA—Continued.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Payne, Tulsa, Woodward.
Mucilago spongiosa (Leyss.) Smothering; Alfalfa, Garfield, Noble, Oklahoma, Osage, Woods.
Mycosphaerella fragariae (Tul.) Lind., Leaf spot; general with collections from Adair, Cherokee, Delaware, Hughes, Pawnee, Payne, Seminole, Tulsa.
Phytophthora cactorum (Leb. & Cohn.) Schroet., Leather rot; Adair.
Phytophthora fragariae Hickman, Red stele; Pittsburg.
Rhizoctonia solani Kuhn, Root rot; Oklahoma.
Rhizopus nigricans Ehrenb. ex Fr., Soft rot; Creek, Seminole.
Sphaerotheca humuli (DC.) Burr., Powdery mildew.
Virus, Strawberry crinkle; Cherokee.
Nonparasitic, Leaf variegation: June yellows; Payne.

FRAXINUS

F. AMERICANA L., WHITE ASH.

Agrobacterium rhizogenes (Riker et al.) Conn, Hairy root.
Fomes fraxinophilus (Pk.) Sacc., Heart rot; Payne.
Phyllosticta viridis Ell. & Kell., Leaf spot; Payne.
Piggotia fraxini Berk. & Curt., Leaf spot; Le Flore.

F. NIGRA Marsh., BLACK ASH.

Cytospora annularis Ell. & Ev., Twig canker; Payne.
Septoria fraxini Desm., Leaf spot; Payne.

F. PENNSYLVANICA Marsh., RED ASH.

Heterodera marioni (Cornu) Goodey, Root knot.

F. PENNSYLVANICA var. LANCEOLATA (Borkh.) Sarg., GREEN ASH.

Heterodera marioni (Cornu) Goodey, Root knot; Haskell.

F. VELUTINA Torr., VELVET ASH.

Cylindrosporium fraxini (Ell. & Kell.) Ell. & Ev., Leaf spot.

Mycosphaerella fraxinicola (Schw.) House, Leaf spot.
Phyllosticta fraxinicola (Currey) Ell. & Ev., Leaf spot; Payne.

F. VELUTINA var. TOUMEYI Rehd., TOUMEY ASH.

Cylindrosporium fraxini (Ell. & Kell.) Ell. & Ev., Leaf spot; Payne.

F. SPP., ASH.

Fomes sp., Wood rot; Payne.

Heterodera marioni (Cornu) Goodey, Root knot.

FRAXINUS—Continued.

Polyporus versicolor L. ex Fr., Heart rot; Payne.
Puccinia peridermiospora (Ell. & Tr.) Arth., Rust; Osage, Payne.
Rhizoctonia solani Kuhn, Seedling blight.
Septoria fraxini Desm., Leaf spot.

FUCHSIA

F. SP., FUCHSIA.
Septoria sp., Leaf spot; Payne.

GAILLARDIA

G. ARISTATA Pursh, COMMON PERENNIAL GAILLARDIA.
Septoria gaillardiae Ell. & Ev., Leaf spot; Payne.
G. PULCHELLA Foug., SHOWY GAILLARDIA.
Septoria gaillardiae Ell. & Ev., Leaf spot; Murray.
G. SP., GAILLARDIA.
Septoria gaillardiae Ell. & Ev., Leaf spot.

GALIUM

G. APARINE L., CATCHWEED BEDSTRAW.
Cuscuta cuspidata Engelm., Dodder; Comanche.

GARDENIA

G. SP., GARDENIA.
Heterodera marioni (Cornu) Goodey, Root knot; Oklahoma, Payne, Pontotoc.
Phomopsis gardeniae Hans. & Barr., Canker; Kay.
Nonparasitic, Bud drop; Payne.

GAURA

G. BIENNIS L., BIENNIAL GAURA.
Cercospora gaurae Kell. & Swing., Leaf spot; Hughes, Payne, Seminole.
Septoria gaurina Ell. & Kell., Leaf spot; Payne, Pottawatomie.
Uromyces plumbarius Pk., Rust; Pottawatomie.
G. COCCINEA Pursh, SCARLET GAURA.
Septoria gaurina Ell. & Kell., Leaf spot; Comanche, Payne.
Uromyces plumbarius Pk., Rust.
G. SINUATA Nutt., WAVYLEAF GAURA.
Cercospora gaurea Kell. & Swing., Leaf spot; Noble, Payne.
Uromyces plumbarius Pk., Rust.

GAYLUSSACIA

G. SPP., HUCKLEBERRY.

Heterodera marioni (Cornu) Goodey, Root knot; Logan.
Rhytisma vaccinii Schw. ex Fr., Tar spot; Le Flore.

GERANIUM

G. CAROLINIANUM L. CAROLINA GERANIUM.

Plasmopara geranii (Pk.) Berl. & De Toni, Downy mildew; Payne.
Synchytrium geranii Clend.; Payne.

GERBERA

G. JAMESONI Bolus, FLAMERAY GERBERA: TRANS-VAAL DAISY.

Erysiphe cichoracearum DC., Powdery mildew; Payne.

GLADIOLUS

G. SPP., GLADIOLUS

Aspergillus sp., Storage rot.

Fusarium oxysporum f. *gladioli* (Massey) Snyder & Hansen, Corm rot; Craig, Oklahoma.

Penicillium gladioli McCul. & Thom, Estorage rot; Oklahoma.

Pseudomonas marginata (McCul.) Stapp, Stem rot: Scab; Oklahoma, Payne.

Septoria gladioli Pass., Heart rot; Craig, Oklahoma.

Xanthomonas gummosudans (McCul.) Starr & Burkh., Bacterial blight; Carter.

GLEBITSIA

G. TRIACANTHOS L., COMMON HONEYLOCUST.

Alternaria sp., Leaf spot.

Botryosphaeria rhizogena (Berk.) Sacc.; Payne.

Cercospora condensata Ell. & Kell., Leaf spot; Oklahoma, Payne.

Melasmia hypophylla (Berk. & Rav.) Sacc., Tar spot; Osage, Payne.

Microsphaera alni DC, ex Wint., Powdery mildew; Atoka.

Phymatotrichum omnivorum (Shear) Dug., Root rot.

GLYCERIA

G. STRIATA (Lam.) Hitchc., FOWL MANNAGRASS.

Pyrenophaeta sp.; Muskogee.

GOMPHRENA

G. GLOBOSEA L., COMMON GLOBEAMARANTH.
Alternaria sp., Leaf spot; Payne.
Cercospora gomphrenae Ray, Leaf spot; Payne.

G. SP., GLOBEAMARANTH.
Alternaria sp., Leaf spot; Payne.

GONOLOBUS

G. LAEVIS Michx., ANGLEPOD.
Cercospora gonolobi Ray, Leaf spot; Payne.
Puccinia obliqua Berk. & Curt., Rust; Payne.

GOSSYPIUM

G. ARBOREUM L., ASIATIC TREE COTTON.
Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot; Payne.

G. BARBADENSE L., SEAISLAND COTTON.
Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot; Payne.

G. CONTEXTUM Cook & Hubbard.
Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot; Payne.

G. HERBACEUM L., LEVANT COTTON.
Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot; Payne.

G. HIRSUTUM L., UPLAND COTTON.
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Oklahoma.
Alternaria sp., Leaf spot & Boll rot; general with collections from Comanche, Garvin, Hughes, Johnston, Lincoln, Muskogee, Okfuskee, Okmulgee, Payne.
Ascochyta gossypii Syd., Blight; general with collections from Grady, Washita.

Aspergillus niger van Tiegh., Boll rot; Bryan, Choctaw, Garvin, Haskell, Hughes, Jefferson, Johnston, Le Flore, McClain, McCurtain, Okfuskee, Oklahoma, Payne, Pittsburg, Seminole, Tillman, Washita.

Aspergillus spp., Boll rot; general.

Brachysporium sp., Boll rot; Johnston, Lincoln, McClain, Muskogee, Pottawatomie, Seminole.

Cercospora gossypina Cke., Leaf spot; general with collections from Blaine, Hughes, Johnston, Muskogee, Okmulgee, Payne, Pottawatomie.

Diplodia sp., Boll rot.

GOSSYPIUM—Continued.

Fusarium chlamydosporum Wr. & Rg., Seedling disease.

Fusarium equiseti var. *bullatum* (Sherb.) Wr., Seedling disease.

Fusarium moniliforme Shield., Pink boll rot: Seedling disease; general with collections from Creek, Garvin, Kiowa, Oklahoma, Payne.

Fusarium oxysporum f. *vasinfectum* (Atk.) Snyder & Hansen, Wilt; Adair, Bryan, Cherokee, Choctaw, Cleveland, Coal, Garvin, Grady, Haskell, Hughes, Jackson, Johnston, Le Flore, Love, Mayes, McCurtain, McIntosh, Muskogee, Okfuskee, Oklahoma, Okmulgee, Pittsburg, Pottawatomie, Seminole.

Fusarium scripti Lamb. & Fautr., Seedling disease; general.

Fusarium scirpi var. *acuminatuna* (E. & E.) Wr., Seedling disease; general.

Fusarium semitectum Berk. & Rav., Seedling disease.

Fusarium solani (Mart.) App. & Wr., Seedling disease.

Fusarium solani var. *martii* (App. & Wr.) Snyder; Seedling disease.

Glomerella gossypii (Southworth) Edg., Anthracnose; Caddo, Coal, Grady, Haskell, Latimer, Le Flore, Lincoln, McCurtain, Muskogee, Okfuskee, Payne, Pittsburg, Pushmataha, Sequoyah, Tulsa.

Helminthosporium spp., Boll rot; Grady, Noble, Stephens.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Beckham, Grady, Okfuskee, Payne.

Penicillium spp., Seedling disease: Boll rot; general.

Phytophthora omnivorum (Shear) Dug., Texas root rot; Atoka, Bryan, Carter, Choctaw, Cotton, Garvin, Jefferson, Johnston, Love, Marshall, McCurtain, Murray, Muskogee, Tillman.

Puccinia schedonnardi Kell. & Swing., Rust.

Rhizoctonia solani Kuhn, Sore shin & Damping off; general with collections from Comanche, Cotton, McIntosh, Seminole, Tillman, Washington.

Rhizopus nigricans Ehrenb. ex Fr., Boll rot; general.

Sclerotium bataticola Taub., Charcoal rot; general with collection from Okmulgee.

Sclerotium rolfsii Sacc., Southern blight; general.

Verticillium alboatrum Reinke & Berth., Wilt; Blaine, Caddo, Greer, Johnston, Tillman, Tulsa.

GOSSYPIUM—Continued.

Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot: Bacterial blight: Boll rot; general with collections from Blaine, Choctaw, Cleveland, Coal, Comanche, Creek, Garvin, Grady, Haskell, Hughes, Jackson, Kiowa, Le Flore, Lincoln, Logan, Love, Marshall, Mayes, McClain, Murray, Muskogee, Noble, Okfuskee, Okmulgee, Payne, Pottawatomie, Seminole, Tillman, Washington.

Nonparasitic, Drought injury & Sun scorch; Payne.

Nonparasitic, Lightning injury; Blaine, Okmulgee.

Nonparasitic, Manganese deficiency; McClain.

Nonparasitic, Potash deficiency; Bryan, Carter, Choctaw, Garvin, Grady, Haskell, Hughes, Mayes, McCurtain, Okfuskee, Payne.

G. PERUVIANUM Cav., PERUVIAN COTTON.

Xanthomonas malvacearum (E.F.Sw.) Dowson, Angular leaf spot; Payne.

G. STURTI F. Muell., AUSTRALIAN COTTON.

Cercospora gossypina Cke., Leaf spot; Payne.

Xanthomonas malvacearum (E.F.Sm.) Dowson, Angular leaf spot; Payne.

GUTIERREZIA

G. DRACUNCULOIDES (DC.) Blake, TARRAGON SNAKEWEED.

Cuscuta arvensis Beyrich, Dodder.

G. SAROTHRAE (Pursh) Britt. & Rusby, BROOM SNAKEWEED.

Cuscuta sp., Dodder; Cimarron.

GYMNOCLADUS

G. DIOICA (L.) Koch, KENTUCKY COFFETREE.

Cercospora gymnocladii Ell. & Kell., Leaf spot; Payne.

Phytophthora omnivorum (Shear) Dug., Root rot.

HALESIA

H. MONTICOLA (Rehd.) Sarg., MOUNTAIN SILVERBELL.

Cercospora halesiae Dearn., Leaf spot; Payne.

HAMAMELIS

H. VIRGINIANA L., COMMON WITCHHAZEL.

Cercospora hamamelidis Ell. & Ev., Leaf spot; Payne.

Ramularia hamamelidis Pk., Leaf spot; Payne.

HEDERA**H. HELIX L., ENGLISH IVY.**

Colletotrichum trichellum (Fr.) Duke, Anthracnose;
Payne.

Erysiphe cichoracearum DC., Powdery mildew;
Oklahoma.

HELIANTHUS**H. ANNUUS L., COMMON SUNFLOWER.**

Cercospora pachypus Ell. & Kell., Leaf spot; Payne.

Erysiphe cichoracearum DC., Powdery mildew; Payne.

Puccinia helianthi Schw., Rust; Cotton, Payne.

Septoria helianthi Ell. & Kell., Leaf spot; Payne.

H. HIRSUTUS Raf., STIFFHAIRE SUNFLOWER.

Puccinia helianthi Schw., Rust.

H. MOLLIS Lam., ASHY SUNFLOWER.

Puccinia helianthi Schw., Rust; Lincoln.

H. PETIOLARIS Nutt., PRAIRIE SUNFLOWER.

Puccinia helianthi Schw., Rust; Ellis.

Uromyces junci (Desm.) Tul.

H. RIGIDUS (Cass.) Desf., STIFF SUNFLOWER.

Coleosporium helianthi (Schw.) Arth., Rust.

H. TUBEROSUS L., JERUSALEMARTICHOKE SUNFLOWER.

Puccinia helianthi Schw., Rust.

H. SPP., SUNFLOWER.

Cuscuta sp., Dodder; Texas.

Puccinia helianthi Schw., Rust; Cotton, Grady, Mayes,
Payne, Texas.

Septoria helianthi Ell. & Kell., Leaf spot; Delaware.

HELIOTROPIUM**H. CURASSAVICUM L., SALT HELIOTROPE.**

Cercospora heliotropii Ell. & Ev., Leaf spot; Payne.

H. SP., HELIOTROPE.

Cuscuta cuspidata Engelm., Dodder; Cimarron.

HEMEROCALLIS**H. SP., DAYLILY.**

Colletotrichum liliacearum Ferraris, Anthracnose;
Payne.

HIBISCUS**H. ESCULENTUS L., OKRA.**

Cercospora malayensis Stev. & Solheim, Leaf spot;
Payne.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Logan, Tulsa.

HIBISCUS—Continued.

Phyllosticta hibiscina Ell. & Ev., Leaf spot; Payne, Seminole.

Rhizoctonia solani Kuhn, Root rot; Payne.

H. *ROSA-SINENSIS* L., CHINESE HIBISCUS.

Cercospora hibisci Tr. & Earle, Leaf spot; Payne.

Cercospora malayensis Stev. & Solheim, Leaf spot; Payne.

Phyllosticta hibiscina Ell. & Ev., Leaf spot.

H. *SYRIACUS* L., SHRUBALTHEA: ROSE-OF-SHARON.

Botryosphaeria ribis var. *chromogena* Shear et al.; Payne.

Cercospora hibisci Tr. & Earle, Leaf spot; Payne.

Cytosporina sp.; Payne.

Dematium pullulans de Bary; Payne.

Fusarium lateritium Nees, Dieback; Payne.

HORDEUM

H. *BULBOSUM* L., BULBOUS BARLEY.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne, Seminole.

Puccinia graminis Pers., Stem rust; Payne.

H. *PUSILLUM* Nutt., LITTLE BARLEY.

Erysiphe graminis DC., Powdery mildew; Payne.

Puccinia glumarum (Schmidt) Erikss., Rust; Payne.

Puccinia graminis Pers., Stem rust; general with collection from Payne.

Scolecotrichum graminis Fckl., Brown stripe; Payne.

Tilletia texana Long, Smut.

Uromyces hordeinus Arth., Rust; Payne.

H. *VULGARE* L., BARLEY.

Claviceps purpurea (Fr.) Tul., Ergot; Caddo.

Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Seminole.

Erysiphe graminis DC., Powdery mildew; general with collections from Delaware, Garvin, McCurtain.

Gibberella zae (Schw.) Petch, Scab.

Helminthosporium gramineum Rabh., Stripe; general with collections from McCurtain, Payne.

Helminthosporium sativum Pam., King, & Bakke, Spot blotch; general with collections from Delaware, Payne, Seminole.

Helminthosporium teres Sacc., Net blotch; general with collections from Delaware, McCurtain, Payne.

Ophiobolus graminis Sacc., Take-all foot rot; Cherokee.

Puccinia anomala Rostr., Leaf rust; general with col-

HORDEUM—Continued.

lections from Bryan, Caddo, Comanche, Lincoln, Payne, Woods.

Puccinia graminis Pers., Stem rust; general with collections from Payne, Seminole.

Rhynchosporium secalis (Oud.) Davis, Leaf scorch; Lincoln.

Sclerospora macrospora Sacc., Downy mildew; Garvin.

Scolecotrichum graminis Fckl., Leaf streak; Payne.

Septoria passerini Sacc., Leaf spot; Lincoln.

Ustilago hordei (Pers.) Lagerh., Covered smut; general with collections from Garfield, Payne, Seminole.

Ustilago nigra Tapke, Shallow-borne loose smut; general.

Ustilago nuda (Jens.) Rostr., Deep-borne loose smut; general with collections from Alfalfa, Custer, Grady, Payne, Seminole.

HYACINTHUS

H. SPP., HYACINTH.

Aspergillus sp., Storage rot; Oklahoma.

Botrytis sp., Storage rot; Oklahoma.

Penicillium sp., Storage rot; Oklahoma.

HYRANGEA

H. ARBORESCENS L., SMOOTH HYDRANGEA.

Cercospora hydrangeae Ell. & Ev., Leaf spot; Payne.

Leptosphaeria vagabunda Sacc.; Adair, Delaware.

H. MACROPHYLLA (Thunb.) DC., BIGLEAF HYDRANGEA.

Cercospora hydrangeae Ell. & Ev., Leaf spot; Payne.

H. SP.

Heterodera marioni (Cornu) Goodey, Root knot; general.

HYMENOPAPPUS

H. SCABIOSAEUS L' Her., WHITEBRACT HYMENOPAPPUS.

Plasmopara halstedii (Farl.) Berl. & De Toni, Downy mildew; Murray.

Puccinia grindeliae Pk., Rust.

HYPOXIS

H. HIRSUTA (L.) Coville, COMMON GOLDSTARGRASS.

Cylindrosporium guttatum Wint., Leaf blotch; Delaware.

ILEX

- I. DECIDUA Walt., POSSUMHAW.
Rhytisma sp., Tar spot; Comanche.
- I. OPACA Ait., AMERICAN HOLLY.
Phyllosticta ilicicola (Cke. & Ell.) Ell. & Ev., Leaf spot; McIntosh.
Phyllosticta opaca Ell. & Ev., Leaf spot; Oklahoma.
- I. SPP., HOLLY.
Alternaria sp., Leaf spot; Cleveland, Oklahoma.
Mucilago spongiosa (Leyss.) Morg., Smothering; Payne.
Phyllosticta spp., Leaf spot; Cleveland, Delaware, Johnston, McIntosh, Tulsa.

IPOMOEA

- I. BATATAS (L.) Lam., SWEETPOTATO.
Actinomyces ipomoea Person & Martin, Soil rot or pox; Haskell, Okfuskee, Oklahoma, Sequoyah.
Alternaria sp., Leaf spot; Payne, Stephens.
Aspergillus sp., Storage rot; Seminole.
Diaporthe batatas (Ell. & Halst.) Harter & Field, Dry rot.
Diplodia tubericola (Ell. & Ev.) Taub., Java black rot; general with collections from McCurtain, Okfuskee, Payne.
Disaeta sp.
Endoconidiophora fimbriata (Ell. & Halst.) Davidson, Black rot; general with collections from Canadian, Craig, Grady, McIntosh, Okfuskee, Oklahoma, Payne, Roger Mills, Seminole, Sequoyah.
Erwinia carotovora (Jones) Winslow et al., Soft rot; Payne, Seminole.
Fusarium batatas Woll., Stem rot or wilt; general with collections from Caddo, Grady, Haskell, Logan, McCurtain, Okfuskee, Oklahoma, Payne, Pottawatomie, Sequoyah, Tulsa.
Fusarium hyperoxsporum Woll., Stem rot or wilt; general with collection from Seminole.
Fusarium oxysporum Schl., Surface rot; general.
Fusarium radicicola Woll.; Tulsa.
Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Creek, Garfield, Haskell, Kiowa, Major, Okfuskee, Oklahoma, Woodward.
Monilochaetes infuscans Ell. & Halst., Scurf; general with collections from Oklahoma, Payne.
Pellicularia filamentosa (Pat.) Rogers, Stem rot; Muskogee.
Penicillium sp., Blue mold; general.

IPOMOEA—Continued.

Phyllosticta batatas (Thum.) Cke., Leaf spot; general with collection from Woodward.

Phymatotrichum omnivorum (Shear) Dug., Texas root rot; southern tier of counties.

Plenodomus destruens Harter, Foot rot; general with collection from Muskogee.

Pythium sp., Root rot.

Rhizopus nigricans Ehrenb. ex Fr., Ring rot: Soft rot; general with collections from Grady, Haskell, Okfuske, Oklahoma, Payne, Seminole, Sequoyah, Tulsa.

Schizophyllum sp., Okfuskee,

Sclerotium bataticola Taub., Charcoal rot; general.

Sclerotium rolfsii Sacc., Southern blight; general with collections from Seminole.

Septoria bataticola Taub., Leaf spot; general.

Trichoderma koningi Oud., Storage rot.

Tylenchus dipsaci (Kuhn) Bast., Stem nematode.

Nonparasitic, Fasciation.

I. HEDERACEA L., IVYLEAF MORNINGGLORY.

Albugo ipomoeae-panduranae (Schw.) Swingle, White rust; Payne.

Coleosporium ipomoeae (Schw.) Burr., Rust; Payne.

I. PANDURATA (L.) Mey., BIGROOT MORNINGGLORY: WILD POTATO VINE.

Albugo ipomoeae-panduranae (Schw.) Swingle, White rust; Muskogee, Payne.

Coleosporium ipomoeae (Schw.) Burr., Rust; Seminole.

I. PURPUREA (L.) Roth, COMMON MORNINGGLORY.

Albugo ipomoeae-panduranae (Schw.) Swingle, White rust; general with collections from Comanche, Logan.

Coleosporium ipomoeae (Schw.) Burr., Rust; Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Logan.

Puccinia crassipes Berk. & Curt., Rust.

I. SP., MORNINGGLORY.

Coleosporium ipomoeae (Schw.) Burr., Rust; Payne.

IRIS

I. VERSICOLOR L., BLUEFLAG IRIS.

Botrytis convoluta Whet. & Dray.; Tulsa.

Heterosporium iridis (Faut. & Roum.) Jacq., Leaf spot; Kay, Payne.

IRIS—Continued.

I. SPP., IRIS.

Colletotrichum lileacearum Ferraris, Anthracnose; Payne.

Didymellina iridis (Desm.) v. Hohnel, Leaf spot; general with collections from Payne, Seminole.

Erwinia carotovora (Jones) Winslow et al., Soft rot; Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Oklahoma.

Pseudomonas marginata (McCul.) Stapp, Bacterial spot; Scab.

Puccinia iridis (DC.) Wallr., Rust; Oklahoma.

IVA

I. CILIATA Willd.

Cuscuta indecora Choisy, Dodder; Beckham.

JASMINUM

J. FLORIDUM Bunge, SHOWY JASMINE.

Coniothyrium sp., Dieback; Payne.

J. HUMILE L., ITALIAN JASMINE.

Agrobacterium tumefaciens (E.F.Sm. & Towns.) Conn, Crown gall; Oklahoma.

Coniothyrium sp., Dieback; Payne.

Rhizoctonia solani Kuhn, Seedling blight; Oklahoma.

J. NUDIFLORUM Lindl., WINTER JASMINE.

Coniothyrium sp., Dieback; Payne.

JUGLANS

J. NIGRA L., EASTERN BLACK WALNUT.

Cylindrosporium juglandis Wolf, Leaf spot; Payne.

Gloeosporium sp., Anthracnose; Payne.

Gnomonia leptostyla (Fr.) Ces. & De Not., Leaf spot; Payne.

Marssonina juglandis (Lib.) Magn., Leaf spot; Payne.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; general.

J. REGIA L., PERSIAN WALNUT.

Cylindrosporium juglandis Wolf, Leaf spot; Lincoln.

Marssonina juglandis (Lib.) Magn., Leaf spot; Johnston, Oklahoma.

Phleospora multimaculans Heald & Wolf, Leaf spot.

Nectria cinnabarina Tode ex Fr., Canker; Oklahoma.

Xanthomonas juglandis (Pierce) Dowson, Bacterial blight; Kingfisher.

JUNIPERUS

J. CHINENSIS var. PFITZERIANA Spaeth, PFITZER CEDAR.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Haskell.

J. MEXICANA Spreng., MEXICAN JUNIPER.
Gymnosporangium exiguum Kern, Leaf rust; Murray.

J. MONOSPERMA (Engelm.) Sarg., ONESEED JUNIPER.
Gymnosporangium sp.; Rust; Payne.

J. SCOPULORUM Sarg., ROCKYMOUNTAIN JUNIPER.
Gymnosporangium betheli Kern, Rust gall; Haskell.
Gymnosporangium exiguum Kern, Leaf rust.

J. VIRGINIANA L., EASTERN REDCEDAR.
Cytospora sp., Needle blight; Atoka.
Daedalea juniperina Murr., Wood rot; Payne.
Gymnosporangium clavipes Cke. & Pk., Rust gall; Payne.
Gymnosporangium floriforme Thaxt., Rust.
Gymnosporangium globosum Farl., Rust gall; Haskell.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Payne.
Gymnosporangium nidus-avis Thaxt., Rust gall; Payne.
Gymnosporangium spp., Rust; Alfalfa, Cleveland, Payne.
Sclerotium bataticola Taub., Charcoal rot; Atoka.
Sphaeropsis sp., Canker; Payne.

J. VIRGINIANA var. CANAERTI Senecl., CANAERT EASTERN REDCEDAR.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Haskell.

J. VIRGINIANA var. GLAUCA Carr., SILVER EASTERN REDCEDAR.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Haskell.

J. VIRGINIANA var. GLOBOSA Beiss., GLOBE EASTERN REDCEDAR.
Gymnosporangium floriforme Thaxt., Rust gall; Payne.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Haskell.

J. VIRGINIANA var. PYRAMIDALIS Carr., PYRAMIDAL EASTERN REDCEDAR.
Gymnosporangium juniperi-virginianae Schw., Rust gall; Haskell.

JUNIPERUS—Continued.

J. SPP., JUNIPER: CEDAR.

Alternaria sp., Leaf spot; Payne, Seminole.

Cercospora sequoiae var. *juniperi* Ell. & Ev., Leaf spot; Tulsa.

Cyanospora albicedrae Heald & Wolf, Whitening; Blaine.

Gloeosporium sp., Anthracnose; Bryan.

Gymnosporangium effusum Kern, Rust gall; Okmulgee.

Gymnosporangium spp., Rust; Muskogee, Okmulgee, Washita.

Phomopsis juniperovora Hahn, Nursery blight; Caddo, Cleveland, Creek, Major, Payne, Tulsa, Woods.

Phytophthora omnivorum (Shear) Dug., Root rot.

JUSSIAEA

J. DECURRENS (Walt.) DC., WATERPRIMROSE.

Alternaria sp., Leaf spot; Muskogee.

J. DIFFUSA Forsk., FLOATING WATERPRIMROSE.

Cercospora jussiaeae Atk., Leaf spot; Payne.

KNIPHOFIA

K. ELEGANS Engl., HOTPOKER TORCHLILY.

Colletotrichum liliacearum Ferraris, Anthracnose; Payne.

KOELERIA

K. CRISTATA (L.) Pers., PRAIRIE JUNEGRASS.

Ellisiella caudata (Pk.) Sacc., Leaf spot; Cleveland.

KOELREUTERIA

K. PANICULATA Laxm., PANICLED GOLDENRAINTREE.

Cytosporina sp., Payne.

Nectria cinnabarinina Tode ex. Fr., Canker; Payne.

Phyllosticta sp., Leaf spot; Payne.

KOLKWITZIA

K. AMABILIS Graebn., BEAUTYBUSH.

Cercospora kolkwitziae Ray, Leaf spot; Payne.

Dothiorella sp.; Payne.

KRIGIA

K. SP., DWARFDANDELION.

Bremia lactucae Regel, Downy mildew; Payne.

LABURNUM

L. ANAGYROIDES Medic, GOLDENCHAIN LABURNUM.

Cercospora laburni Ray, Leaf spot; Payne.

LACTUCA

- L. CANADENSIS L., CANADA LETTUCE.
Septoria lactucicola Ell. & Mart., Leaf spot; Murray, Payne.
- L. SATIVA L., GARDEN LETTUCE.
Alternaria sp., Leaf spot; Seminole.
Heterodera marioni (Cornu) Goodey, Root knot; Craig, Logan.
Pythium sp., Root rot; Payne.
Sclerotium sclerotiorum (Lib.) Mass., Drop; Tulsa.
Virus, Aster yellows; Tulsa.
Nonparasitic, Tipburn; Payne.
- L. SP., CELTUCE.
Bremia lactucae Reg., Downy mildew; Payne.

LAGERSTROEMIA

- L. INDICA L., COMMON CRAPEMYRTLE.
Cuscuta sp., Dodder; Harper.
Erysiphe lagerstroemiae West, Powdery mildew; Bryan, Carter, Oklahoma, Payne.
Phyllosticta lagerstroemiae Ell. & Ev., Leaf spot.

LAMIUM

- L. AMPLEXICAULE L., HENBIT DEADNETTLE.
Erysiphe cichoracearum DC., Powdery mildew; Payne.
Septoria lamii Pass., Leaf spot; Payne.

LAPORTEA

- L. CANADENSIS (L.) Gaud., CANADA WOODNETTLE.
Gloeosporium laportae Pk., Leaf spot; Osage, Washington.

LATHYRUS

- L. LATIFOLIUS L., PERENNIAL SWEETPEA.
Cercospora lathryina Ell. & Ev., Leaf spot; Payne.
- L. ODORATUS L., SWEETPEA.
Corynebacterium fascians (Tilford) Dowson, Fasciation; Payne.
Erysiphe polygoni DC., Powdery mildew; Payne.
Heterodera marioni (Cornu) Goodey, Root knot; general.
Heterosporium sp., Leaf spot; Oklahoma.
Phytoponas lathyri Manns & Taub., Payne, Seminole.
Rhizoctonia solani Kuhn, Damping off; Oklahoma.

LAVANDULA

L. SP., LAVENDAR.

Septoria lavandulae Desm., Leaf spot; Oklahoma.

LEPIDIUM

L. VIRGINICUM L., VIRGINIA PEPPERWEED.

Cuscuta arvensis Beyrich, Dodder; Payne.

Peronospora parasitica (Pers.) Fr., Downy mildew; Noble, Payne.

LEPTOCHLOA

L. FILIFORMIS (Lam.) Beauv., RED SPRANGLETOP.

Puccinia bartholomaei Diet., Leaf rust; Haskell, Payne.

LEPTOLOMA

L. COGNATUM (Schult.) Chase, FALL WITCHGRASS.

Puccinia imposita Arth., Rust; general with collection from Payne.

LESPEDEZA

L. HIRTA (L.) Hornem., HAIRY LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Le Flore.

L. INTERMEDIA (Wats.) Britt., WAND LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Logan, Payne.

L. PROCUMBENS Michx., TRAILING LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Payne.

L. REPENS (L.) Bart., CREEPING LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Choctaw.

L. STUVEI Nutt., STUVES LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Payne.

L. VIOLACEA L., VIOLET LESPEDEZA.

Darluca filum (Biv.) Cast., Parasitic on

Uromyces lespedezae-procumbentis (Schw.) Curt on living leaves; McCurtain.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; McCurtain, Payne.

L. VIRGINICA (L.) Britton, SLENDER LESPEDEZA.

Uromyces lespedezae-procumbentis (Schw.) Curt., Rust; Craig, Lincoln, Osage.

LESPEDA—Continued.

L. SPP., LESPEDEZA.

Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn,
Crown gall; Logan.
Cuscuta arvensis Beyrich, Dodder; Muskogee.

LIATRIS

L. PUNCTATA Hook., DOTTED GAYFEATHER.
Cuscuta glomerata Choisy, Dodder; Cleveland.
L. SCARIOSA (L.) Willd., TALL GAYFEATHER.
Erysiphe cichoracearum DC., Powdery mildew; Payne.

LIGUSTRUM

L. AMURENSE Carr., AMUR PRIVET.
Cercospora adusta Heald & Wolf, Leaf spot; Payne.
Microsphaera alni DC. ex Wint., Powdery mildew;
Payne.
L. IBOLIUM Coe, IBOLIUM PRIVET.
Cercospora adusta Heald & Wolf., Leaf spot; Payne.
L. OVALIFOLIUM Hassk., CALIFORNIA PRIVET.
Cercospora adusta Heald & Wolf, Leaf spot; Payne.
L. VULGARE L., EUROPEAN PRIVET.
Armillaria mellea Vahl ex Fr., Mushroom root rot;
Logan.
Coniothyrium sp.; Garfield.
Cytospora sp.; Payne.
Fusarium sp., Root rot; Payne.
Glomerella cingulata (Ston.) Spauld.& Schrenk,
Anthracnose; Alfalfa, Payne.
Nectria cinnabarina Tode ex Fr., Canker; Payne.
L. SP., PRIVET.
Phymatotrichum omnivorum (Shear) Dug., Root rot.

LILIUM

L. MONADELPHUM Marsh.& Bieb., CAUCASIAN LILY.
Colletotrichum liliacearum Ferraris, Anthracnose;
Payne.
L. REGALE Wils., REGAL LILY.
Botrytis sp., Blight; Kay.

LINARIA

L. CANADENSIS (L.) Dumont, OLDFIELD TOADFLAX.
Peronospora linariae Fckl., Downy mildew; Payne.

LINUM

L. USITATISSIMUM L., COMMON FLAX.
Fusarium lini Bolley, Wilt.
Melampsora lini (Pers.) Lev., Rust.
Rhizoctonia solani Kuhn, Root rot; Payne.
Septoria linicola (Speg.) Garassini, Pasmo disease;
 Payne, Washington.
Nonparasitic, Heat canker; Mayes.

LIPPIA

L. LANCEOLATA Michx., FOGFRUIT.
Cercospora lippiae Ell. & Ev., Leaf spot; Kingfisher.

LIQUIDAMBAR

L. STYRACIFLUA L., AMERICAN SWEETGUM.
Peltella sp., Leaf spot; McCurtain.
Septoria liquidambaris Cke. & Ell., Leaf spot; Le Flore.

LOBELIA

L. CARDINALIS L., CARDINALFLOWER.
Septoria lobeliae Pk., Leaf spot; Cleveland, Delaware.
 L. PUBERULA Michx., DOWNY LOBELIA.
Cercospora ferruginea Fckl., Leaf spot; Creek.
 L. SIPHILITICA L., BIGBLUE LOBELIA.
Septoria lobeliae Pk., Leaf spot; Murray.

LOLIUM

L. MULTIFLORUM Lam., ITALIAN RYEGRASS.
Claviceps purpurea (Fr.) Tul., Ergot.
Puccinia coronata Cda., Crown rust; Bryan.
 L. PERENNE L., PERENNIAL RYEGRASS.
Claviceps purpurea (Fr.) Tul., Ergot; Payne.
Puccinia coronata Cda., Crown rust; Payne.
Puccinia rubigo-vera agropyri (Erikss.) Arth., Leaf
 rust; Payne.

LOMATIUM

L. DAUCIFOLIUM (Nutt.) Coult. & Rose, CARROT-
 LEAVED LOMATIUM.
Puccinia jonesii Peck, Rust; Payne.
 L. ORIENTALE Coult. & Rose, LOMATIUM.
Puccinia jonesii Peck, Rust.

LONICERA

L. HECKROTTI Rehd., EVERBLOOMING HONEY-
 SUCKLE.
Microsphaera alni DC. ex Wint., Powdery mildew;
 Payne.

LONICERA—Continued.

L. ORIENTALIS var. CAUCASICA (Pall.) Zabel, BUCK-THORN HONEYSUCKLE.
Phyllosticta sp., Leaf spot; Payne.
 L. SP., HONEYSUCKLE.
Phyllosticta lonicerae Westd., Leaf spot; Oklahoma.

LOTUS

L. AMERICANUS (Nutt.) Bisch., SPANISHCLOVER
 DEERVETCH.
Cercospora sp., Leaf spot; Garvin, Murray.

LUDVIGIA

L. ALTERNIFOLIA L., SEEDBOX.
Cercospora ludwigiae Atk., Leaf spot; Ottawa.

LYCIUM

L. PALLIDUM Miers, PALE WOLFBERRY.
Cercospora lycii Ell. & Halst., Leaf spot; Payne.
Puccinia tumidipes Pk., Rust; Payne.

LYCOPERSICON

L. ESCULENTUM Mill., COMMON TOMATO.
Alternaria solani (Ell. & Mart.) Jones & Grout, Early blight; general with collections from Delaware, Oklahoma, Osage, Payne, Wagoner.
Alternaria tomato (Cke.) Weber, Nailhead spot; Oklahoma, Seminole, Woodward.
Bacterium punctulans M.K.Bryan, Bacterial speck; Muskogee, Oklahoma.
Bacterium solanacearum E.F.Sm., Bacterial wilt; general with collections from Creek, Le Flore, Ottawa, Payne, Seminole, Tulsa.
Cladosporium fulvum Cke., Leaf mold; Payne.
Colletotrichum phomoides (Sacc.) Chester, Anthracnose; Cleveland, Payne, Seminole, Washita.
Corynebacterium michiganense (E.F.Sm.) Jensen, Bacterial canker; general with collections from Bryan, Delaware, Logan, Payne, Seminole, Tulsa, Woods.
Fusarium oxysporum f. *lycopersici* (Sacc.) Snyder & Hansen, Wilt; Atoka, Bryan, Cleveland, Haskell, Le Flore, Lincoln, Noble, Okmulgee, Oklahoma, Payne, Seminole, Tulsa, Woodward.
Fusarium sp., Fruit rot; Payne.

LYCOPERSICON—Continued.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Adair, Beckham, Caddo, Cherokee, Craig, Ellis, Garfield, Oklahoma, Payne, Seminole, Tillman, Tulsa, Washington, Woods.

Pellicularia filamentosa (Pat.) Rogers, Damping off; Okmulgee.

Phoma destructiva Plowr., Phoma rot.

Phymatotrichum omnivorum (Shear) Dug., Texas root rot; Carter.

Phytophthora terrestris Sherb., Buckeye rot; Sequoyah.

Pythium aphanidermatum (Edson) Fitz., Damping off; Okmulgee.

Rhizoctonia solani Kuhn, Damping off; Okmulgee.

Sclerotium rolfsii Sacc., Southern blight; Muskogee.

Septoria lycopersici Speg., Leaf spot; general with collections from Adair, Alfalfa, Blaine, Le Flore, Oklahoma, Osage, Payne, Tillman, Tulsa, Woodward.

Xanthomonas vesicatoria (Dodge) Dowson, Bacterial spot; Adair, Cleveland, Payne, Seminole, Woodward.

Virus, Curley top: Western yellow blight; Payne.

Virus, Double-virus streak; Oklahoma, Payne.

Virus, Single-virus streak; Payne.

Virus, Tomato mosaic; general with collections from Logan, Osage, Payne.

Nonparasitic, Blossom-end rot; general with collections from Payne, Pittsburg, Seminole, Tulsa.

Nonparasitic, Catface; general with collection from Payne.

LYCOPUS

L. AMERICANUS Muhl., AMERICAN BUGLEWEED.
Phyllosticta decidua Ell. & Kell., Leaf spot; Woods.

MAGNOLIA

M. ACUMINATA L., CUCUMBERTREE.
Cladosporium fasciculatum Cda.; Payne.

M. SPP., MAGNOLIA.
Septoria magnoliae Cke., Leaf spot; Atoka, Bryan, Hughes, Pittsburg.
Nonparasitic, Winter browning; Mayes.

MAHONIA

M. AQUIFOLIUM (Pursh) Nutt., OREGONGRAPE.
Coniothyrium sp., Leaf spot; Comanche.
Phyllosticta sp., Leaf spot; Oklahoma.

MALUS

M. BACCATA (L.) Borkh., SIBERIAN CRABAPPLE.
Gymnosporangium globosum Farl., Rust; Creek, Garfield.

M. IOENSIS (Wood) Britton, PRAIRIE CRABAPPLE.
Gymnosporangium juniperi-virginianae Schw., Rust; Payne.

M. SYLVESTRIS Mill., APPLE.
Agrobacterium rhizogenes (Riker et al.) Conn, Hairy root; Le Flore.
Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn, Crown gall; general with collections from Caddo, Cherokee, Haskell, Payne, Seminole, Woods.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Bryan, Cherokee.
Botryosphaeria ribis (Tode ex Fr.) Gross.& Dug., Black rot; Dewey, Nowata, Payne.
Cephalothecium roseum Cda., Pink mold rot; Payne.
Clitocybe monadelpha (Morgan) Sacc., Root rot.
Cytospora leucostoma Sacc., Dieback; general with collections from Payne, Seminole.
Erwinia amylovora (Burr.) Winslow, Fire blight; general with collections from Adair, Alfalfa, Carter, Creek, Delaware, Dewey, Garfield, Haskell, Jefferson, Le Flore, McIntosh, Noble, Okmulgee, Payne, Rogers, Seminole, Sequoyah, Wagoner, Washita.
Fusicladium dendriticum (Wallr.) Fckl., Scab; general with collections from Payne.
Gloeodes pomigena (Schw.) Colby, Sooty blotch; general with collections from Garvin, Haskell, Payne.
Glomerella cingulata (Ston.) Spauld.& Schrenk, Bitter rot; general with collection from Payne.
Gymnosporangium juniperi-virginianae Schw., Rust; Cherokee, Creek, Dewey, Lincoln, Muskogee, Okmulgee, Osage, Pawnee, Payne, Washita.
Leptothyrium pomi (Mont.& Fr.) Sacc., Fly speck; general with collections from Cherokee, Delaware, Garvin, Payne.
Monilinia fructicola (Wint.) Honey, American brown rot; Bryan, Garvin, Murray, Okfuskee, Tulsa.
Neofabraea malicorticis Jack., Northwestern anthracnose; Payne.
Nummularia discreta (Schw.) Tul., Blister canker; Payne.
Penicillium sp., Storage rot; Payne.
Phoma pomi Pass., Fruit spot; Payne.

MALUS—Continued.

Phyllosticta solitaria Ell. & Ev., Blotch; Adair, Alfalfa, Bryan, Canadian, Coal, Comanche, Creek, Delaware, Dewey, Garfield, Garvin, Haskell, Johnston, Kay, Le Flore, Lincoln, Major, McClain, McCurtain, Murray, Noble, Nowata, Okfuskee, Oklahoma, Okmulgee, Pawnee, Payne, Pittsburg, Pontotoc, Seminole, Tillman, Tulsa, Wagoner, Woods, Woodward.

Physalospora obtusa (Schw.) Cke., Black rot: Frog eye leaf spot; general with collections from Adair, Craig, Delaware, Dewey, Garvin, Grant, Lincoln, Mayes, McCurtain, Okfuskee, Payne, Pittsburg, Seminole, Tulsa.

Podosphaera leuctotricha (Ell. & Ev.) Salm., Powdery mildew; Payne.

Polyporus versicolor L. ex Fr., Heartrot; Payne.

Valsa ambiens Pers. ex Fr., Canker & Dieback; Payne.

Valsa leucostoma Pers. ex Fr., Canker; Payne.

Venturia inaequalis (Cke.) Wint., Scab; general with collections from Adair, Bryan, Cherokee, Garvin, Haskell, Oklahoma, Pawnee, Payne, Seminole, Woods.

Xylaria mali Fromme, Black root rot; Alfalfa, Delaware, Seminole, Pottawatomie.

Nonparasitic, Bitter pit: Water core.

Nonparasitic, Johnathon spot.

Nonparasitic, Late frost injury.

Undetermined, Measles.

MALVA

M. ROTUNDIFOLIA L., RUNNING MALLOW.

Puccinia malvacearum Bert., Rust; Payne.

MANISURIS

M. CYLINDRICA (Michx.) Kuntze, CAROLINA JOINT-TAIL.

Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.

Septoria sp., Leaf spot; Woodward.

MARRUBIUM

M. VULGARE L., COMMON HOARHOUND.

Cercospora marrubii Tharp, Leaf spot; Payne.

MEDICAGO

M. HISPIDA Gaertn., CALIFORNIA BURCLOVER.

Colletotrichum trifolii Bain, Anthracnose; Payne.

M. LUPULINA L., BLACK MEDIC.

Uromyces striatus medicaginis (Pass.) Arth., Rust; Payne.

M. SATIVA L., ALFALFA.

Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall.

Alternaria sp., Sooty mold; Grady.

Ascochyta imperfecta Pk., Black stem; Alfalfa, Blaine, Caddo, Canadian, Creek, McCurtain, Tillman.

Cephalobus elongatus de Man, Nematode.

Cercospora zebrina Pass., Leaf spot; McCurtain, Payne.

Colletotrichum trifolii Bain, Anthracnose; Garvin, Grant, Lincoln, Okfuskee, Payne.

Corynebacterium insidiosum (McCul.) Jensen, Bacterial wilt; general with collections from Cotton, Creek, Garvin, Grant, Lincoln, Mayes, McClain, McCurtain, Murray, Oklahoma, Payne, Seminole, Texas, Tillman, Washita.

Cuscuta indecora Choisy, Dodder; Garfield.

Cuscuta sp., Dodder; Payne, Tillman.

Empusa aphidis Hoffm., Parasitic on *Illinoia pisi* on living leaves; Payne.

Fusarium spp., Root rot & Crown rot; general with collections from Caddo, Cherokee, Delaware, Garvin, Kingfisher, Lincoln, Okfuskee, Oklahoma.

Gloeosporium medicaginis Ell. & Kell. Anthracnose; Muskogee, Seminole.

Helicobasidium purpureum (Tul.) Pat., Violet root rot; Garvin, Grady, Kingfisher, Okfuskee, Oklahoma.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Alfalfa, Haskell, Okfuskee.

Peronospora trifoliorum DeBy., Downy mildew; Okfuskee, Payne, Rogers.

Phoma medicaginis Malbr. & Roum., Black stem; general with collection from Payne.

Phyllosticta medicaginis (Fckl.) Sacc., Leaf spot; Payne.

Phymatotrichum omnivorum (Shear) Dug., Texas root rot; general in southern Oklahoma.

Pleosphaerulina briosiana Poll., Leaf spot; Payne.

Pseudomonas medicaginis Sackett, Bacterial stem blight; Alfalfa, Canadian, Garvin, Harmon, Hughes, Okfuskee, Oklahoma, Payne, Seminole.

Pseudopeziza medicaginis (Lib.) Sacc., Leaf spot; spot; Alfalfa, McClain.

Pyrenopeziza medicaginis Fckl., Leaf spot; Payne.

Rhizoctonia solani Kuhn, Damping off; Delaware, Johnston.

Sclerotium bataticola Taub., Charcoal rot; Woodward.

MEDICAGO—Continued.

Sporonema phacidoides Desm., Leaf spot; Canadian, Payne.

Tylenchus dipsaci (Kuhn) Bast., Stem nematode; Garvin, Payne, Pottawatomie, Washita.

Uromyces striatus medicaginis (Pass.) Arth., Rust; Carter, Cleveland, McCurtain, Muskogee, Noble, Oklahoma, Payne, Seminole, Tillman, Woodward.

Virus, Alfalfa mosaic; general with collections from Canadian, Payne, Seminole, Washita.

Nonparasitic, Heat & Drought injury; Kiowa.

Nonparasitic, Winter injury; Payne.

MELIA

M. AZEDARACH L., CHINABERRY.

Nectria cinnabarina Tode ex Fr., Dieback; Payne.

MELICA

M. NITENS (Scribn.) Nutt., THREEFLOWER MELIC.

Colleotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Cherokee.

MELILOTUS

M. ALBA Desr., WHITE SWEETCLOVER.

Ascochyta pisi Lib., Leaf spot & Black stem; Blaine. *Cercospora davisii* Ell. & Ev., Leaf spot; Payne, Seminole.

Colletotrichum trifolii Bain, Anthracnose; Delaware.

Fusarium sp., Root rot; Delaware.

Mycosphaerella lethalis R.E.Stone, Black stem; Seminole.

Phytonomas lathryi Manns & Taub., Streak; Seminole. *Virus*, Mosaic; Canadian.

M. OFFICINALIS (L.) Lam., YELLOW SWEETCLOVER.

Cercospora davisii Ell. & Ev., Leaf spot; Payne.

MIMOSA

M. SP., MIMOSA.

Nectria cinnabarina Tode ex Fr., Canker; Payne.

MONARDA

M. CLINOPODIOIDES A. Gray, BEEBALM.

Cercospora sp., Leaf spot; Payne.

M. DISPERSA Small, PURPLE LEMON BEEBALM.

Phyllosticta decidua Ell. & Kell., Leaf spot; Murray.

M. FISTULOSA var. MOLLIS (L.) Benth., SOFT WILD-BERGAMOT BEEBALM.

Puccinia menthae Pers., Rust; Adair.

MONARDA—Continued.

M. PUNCTATA L., SPOTTED BEEBALM.

Phyllosticta decidua Ell. & Kell., Leaf spot; McCurtain.

MONOLEPIS

M. NUTTALLIANA (R. & S.) S. Wats., NUTTALL MONOLEPIS.

Peronospora effusa (Grev.) Rabh., Downy mildew; Payne.

MORUS

M. ALBA L., WHITE MULBERRY.

Armillaria mellea Vahl ex Fr., Root rot.

Cercospora moricola Cke., Leaf spot; Payne.

Cercosporella mori Pk., Leaf spot; Haskell.

Cylindrosporium ulmicola Ell. & Ev., Leaf spot; Comanche, Payne.

Heterodera marionii (Cornu) Goodey, Root knot; Haskell, Payne.

Phymatotrichum omnivorum (Shear) Dug., Root rot.

Pseudomonas mori (Boyer & Lambert) F.L. Stevens, Bacterial blight; Canadian, Muskogee, Payne.

M. RUBRA L., RED MULBERRY.

Cylindrosporium mori Berl., Leaf spot; Payne.

Cylindrosporium ulmicola Ell. & Ev., Leaf spot; Payne.

M. SP., MULBERRY.

Sphaeropsis mori Ell. & Ev., Canker; Payne.

MUHLENBERGIA

M. CAPILLARIS (Lam.) Trin., HAIRAWN MUHLY.

Colletotrichum graminicolum (Ces.) G.W. Wils., Anthracnose; Payne.

Phyllachora vulgata Theiss. & Syd., Black spot; Payne.

M. MEXICANA (L.) Trin., WIRESTEM MUHLY.

Colletotrichum graminicolum (Ces.) G.W. Wils., Anthracnose; Payne.

Puccinia schedonnardi Kell. & Swingle, Rust; Cleveland.

M. RACEMOSA (Michx.) B.S.P., GREEN MUHLY.

Colletotrichum graminicolum (Ces.) G.W. Wils., Anthracnose; Payne.

M. SCHREBERI Gmel., NIMBLEWILL.

Puccinia schedonnardi Kell. & Swingle, Rust.

M. SOBOLIFERA (Muhl.) Trin., ROCK MUHLY.

Leptosphaeria muhlenbergiae (Ell.) Niessl, Muskogee.

MUNROA

M. **SQUARROSA** (Nutt.) Torr., FALSE BUFFALOGRASS.
Septoria munroae Ell. & Barth., Leaf spot; Beaver.

MYRICA

M. **CERIFERA** L., SOUTHERN WAXMYRTLE.
Ramularia moniloides Ell. & Mart., Leaf spot; Payne.

NANDINA

N. **DOMESTICA** Thunb., NANDINA.
Cercospora nandinae Nagatomo, Leaf spot; Payne.
Glomerella cingulata (Ston.) Spauld. & Schrenk,
 Anthracnose; Payne.
Phyllosticta nandinae Tassi, Leaf spot; Oklahoma.

NARCISSUS

N. SPP., NARCISSUS.
Aspergillus sp., Bulb rot; Oklahoma.
Botrytis sp., Blight.
Penicillium sp., Bulb rot; Oklahoma.
Virus, Narcissus mosaic; Payne.

NELUMBO

N. **LUTEA** (Willd.) Pers., AMERICAN LOTUS: WATER CHINKAPIN.
Alternaria nelumbii Enlows & Rand, Leaf spot; Payne.

NICOTIANA

N. **TABACUM** L., COMMON TOBACCO.
Bacterium solanacearum E.F.Sm., Bacterial wilt.
Pseudomonas tabaci (Wolf & Foster) Stapp, Fire blight.
Thielavia basicola (B. & Br.) Zopf, Root rot.
Virus, Tobacco mosaic.

NOTHOSCORDUM

N. **BIVALVE** (L.) Britton, YELLOW FALSEGARLIC.
Colletotrichum sp., Anthracnose; Payne.
Uromyces hordeinus Arth., Rust.
Uromyces primaverilis Speg., Rust; Payne.

NYMPHAEA

N. **ODORATA** Ait., AMERICAN WATERLILY.
Entyloma nymphaeae (Cunn.) Setch., Leaf smut;
 Payne.

OENOTHERA

- O. BIENNIS L., COMMON EVENINGPRIMROSE.
Septoria oenotherae Westd., Leaf spot; Cleveland.
Uromyces plumbarius Peck, Rust.
- O. LACINIATA Hill, CUTLEAF EVENINGPRIMROSE.
Peronospora arthuri Farl., Downy mildew; Payne.
Septoria oenotherae Westd., Leaf spot; Creek, Greer,
 Murray, Muskogee, Payne.
Synchytrium fulgens Schroet.; Payne.
Uromyces plumbarius Peck, Rust.
- O. MISSOURIENSIS Sims, OZARK SUNDROPS.
Septoria oenotherae Westd., Leaf spot; Ellis, McClain,
 Noble, Payne.
- O. MISSOURIENSIS var. INCANA A. Gray.
Septoria oenotherae Westd., Leaf spot; Ellis.
- O. OKLAHOMENSIS (Norton) Lev., OKLAHOMA EVENINGPRIMROSE.
Septoria oenotherae Westd., Leaf spot; Payne.
- O. PALLIDA Lindl., PALE EVENINGPRIMROSE.
Septoria oenotherae Westd., Leaf spot; McClain.
- O. RHOMBIPETALA Nutt., RHOMBICPETALLED EVENINGPRIMROSE.
Septoria oenotherae Westd., Leaf spot; Oklahoma.
- O. SERRULATA Nutt., SERRATELEAF EVENINGPRIMROSE.
Pestalotia oenotherae Ell. & Barth., Leaf spot; Payne.
Septoria oenotherae Westd., Leaf spot; Payne.
- O. SPECIOSA Nutt., SHOWY EVENINGPRIMROSE.
Septoria oenotherae Westd., Leaf spot; Caddo, Grady,
 Kay, Murray, Pawnee, Payne.
- O. SPP., EVENINGPRIMROSE.
Cuscuta arvensis Beyrich, Dodder; Oklahoma.
Puccinia extensicola oenotherae (Mont.) Arth., Rust.

OPUNTIA

- O. RAFINESQUII Engelm., COMMON PRICKLYPEAR.
Erwinia cactida (Johnst. & Hitch.) Winslow et al.,
 Bacterial rot; general.
Phoma sp., Stem rot; general with collection from
 Osage.
Phyllosticta concava Seaver, Leaf spot; Oklahoma.

ORNITHOGALUM

O. THYRSOIDES Jacq. var. AUREUM, GOLDEN CAPE CHINKERICHEE.
Virus, Ornithogalum mosaic; Payne.

OXALIS

O. CORNICULATA L., CREEPING OXALIS.
Puccinia andropogonis oxalidis Arth., Rust; southern part of state.
O. FILIPES Small, SLENDER YELLOW WOODSORREL.
Puccinia sorghi Schw., Rust.
O. VIOLACEA L., VIOLET WOODSORREL.
Puccinia sorghi Schw., Rust; Pawnee, Payne.

PAEONIA

P. SPP., PEONY.
Alternaria sp., Leaf spot; Murray.
Botrytis paeoniae Oud., Blight; Murray.
Cercospora paeoniae Tehon & Daniels, Leaf spot; Tulsa.
Cladosporium paeoniae Pass., Leaf blotch; Oklahoma.
Discosia artocreas Tode ex Fr., Leaf spot; Murray.
Phyllosticta commonsii Ell. & Ev., Leaf spot; Garfield.

PANICUM

P. BOSCII var. MOLLE (Vasey) Hitchc. & Chase.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.
P. CAPILLARE L., COMMON WITCHGRASS.
Puccinia emaculata Schw., Rust.
P. CLANDESTINUM L., CORN GRASS: DEER TONGUE GRASS.
Septoria sp., Leaf spot; Payne.
P. COMMUTATUM Schultes, VARIABLE PANICUM.
Phyllachora punctum (Schw.) Orton, Black spot; McCurtain.
P. HUACHUCAE var. FASCICULATUM (Torr.) Hubb.
Phyllachora punctum (Schw.) Orton, Black spot; Cherokee.
P. OBTUSUM HBK., VINE-MESQUITE.
Phyllachora wilsoni Orton, Black spot; Lincoln, Payne.
Phyllosticta sp., Leaf spot; Payne.
P. TENNESSEENSE Ashe, TENNESSEE PANICUM.
Phyllachora punctum (Schw.) Orton, Black spot; Payne.
P. TEXANUM Buckl., TEXAS PANICUM.
Chaetomella atra Fckl., Canadian.

PANICUM—Continued.

P. *VIRGATUM* L., SWITCHGRASS.
Darluca filum (Biv.) Cast., Parasitic on *Uromyces graminicola* Burr. on living leaves; Payne.
Phyllachora graminis (Pers. ex Fr.) Fckl., Black spot; Craig.
Puccinia panici Diet., Rust; Craig.
Septoria sp., Leaf spot.
Tilletia pulcherrima Ell. & Gall., Kernel smut; Payne.
Uromyces graminicola Burr., Rust; Okfuskee, Osage, Payne.

PARTHENOCISSUS

P. *QUINQUEFOLIA* (L.) Planch., VIRGINIA CREEPER.
Phyllosticta viticola (Berk. & Curt.) Thum., Leaf spot; Adair.
P. *TRICUSPIDATA* (Sieb. & Zucc.) Planch., JAPANESE CREEPER: BOSTON IVY.
Guignardia bidwellii (Ell.) Viala & Ravaz, Black rot; Grady.

PASPALUM

P. *STRAMINEUM* Nash, SAND PASPALUM.
Cercospora paspali Ray, Leaf spot; Payne.
Phyllachora wilsoni Orton, Black spot.
Puccinia emaculata Schw., Rust; Payne.
Puccinia substriata Ell. & Barth., Rust.
P. SP., PASPALUM.
Phaeosphaerella paspali Tehon, Leaf spot; Payne.

PASSIFLORA

P. *INCARNATA* L., MAYPOP PASSIONFLOWER.
Cercospora biformis Peck, Leaf spot; Payne, Pittsburg.

PASTINACA

P. *SATIVA* L., GARDEN PARSNIP.
Heterodera marioni (Cornu) Goodey, Root knot; Comanche, Tulsa.

PENSTEMON

P. *COBAEA* Nutt., COBAEA PENSTEMON.
Cercospora pentstemonis Ell. & Kell., Leaf spot; Pawnee.
P. *JAMESII* Benth., JAMES PENSTEMON.
Puccinia andropogonis pentstemonis (Schw.) Arth., Rust.

PENSTEMON—Continued.

P. **PALLIDUS** Small, PALE PENSTEMON.
Cercospora pentstemonis Ell. & Kell., Leaf spot; Payne.
 P. **TENUIFLORUS** Pennell.
Puccinia andropogonis pentstemonis (Schw.) Arth.,
 Rust.

PEROVSKIA

P. **ATRIPLICIFOLIA** Benth., RUSSIANSAGE PEROVSKA.
Cylindrosporium sp., Leaf spot; Payne.
Phoma sp., Stem canker; Payne.

PETALOSTEMUM

P. **OLIGOPHYLLUM** (Torr.) Rydb., SLENDER WHITE PRAIRIECLOVER.
Pyrenophora comata (Awd. & Niessl) Sacc.; Murray.
 P. **PURPUREUM** (Vent.) Rydb., PURPLE PRAIRIECLOVER.
Pyrenophora comata (Awd. & Niessl) Sacc.; Murray.

PETROSELINUM

P. **CRISPUM** (Mill.) Nym., COMMON GARDEN PARSLEY.
Septoria petroselini Desm., Leaf spot; Oklahoma,
 Payne.

PETUNIA

XP. **HYBRIDA** Vilm., COMMON PETUNIA.
Cercospora petuniae Mull. & Chupp, Leaf blotch;
 Payne.
Custuta sp., Dodder; Harper, Pittsburg.
Virus, Cucumber mosaic; Carter, Payne.

PHALARIS

P. **ANGUSTA** Nees, TIMOTHY CANARYGRASS.
Puccinia graminis Pers., Stem rust.
Puccinia sessilis Schneid., Leaf rust.
 P. **CAROLINIANA** Walt., CAROLINA CANARYGRASS.
Puccinia coronata Cda., Crown rust; general.
 P. **TUBEROSA** var. **STENOPTERA** (Hack.) Hitchc., HARDINGGRASS.
Cercospora sp., Leaf spot; Payne.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Payne.

PHASEOLUS

P. AUREUS Roxb., MUNG BEAN.

Heterodera marioni (Cornu) Goodey, Root knot; Oklahoma.

Nematospora coryli Peglion, Yeast spot; Payne.

Sclerotium bataticola Taub., Charcoal rot; Garfield.

Xanthomonas phaseoli (E.F.Sm.) Dowson, Leaf & pod blight; Garfield.

P. LUNATUS L., LIMA BEAN.

Cercospora cruenta Sacc., Leaf spot; Cleveland.

Colletotrichum truncatum (Schw.) Andrus & Moore, Anthracnose; Payne.

Pseudomonas syringae Van Hall, Bacterial spot; Payne.

P. VULGARIS L., BEAN.

Alternaria fasciculata (Cke.& Ell.) Jones & Grout, Leaf spot; general with collection from Seminole.

Bacterium solanacearum E.F.Sm., Bacterial wilt; Okmulgee.

Colletotrichum lindemuthianum (Sacc.& Magn.) Briosi & Cav., Anthracnose; general with collections from Le Flore, Payne, Seminole.

Fusarium martii var. *phaseoli* Burk., Dry root rot; Cleveland, Seminole.

Fusarium spp., Root rot; Carter, Hughes, Nowata.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Beckham, Carter, Grady, Payne, Seminole, Tulsa.

Pellicularia filamentosa (Pat.) Rogers, Stem rot; Adair, Hughes, Le Flore, Payne.

Phyllosticta phaseolina Sacc., Leaf spot; Payne.

Pseudomonas medicaginis var. *phaseolicola* (Burkh.) Stapp & Kotte, Halo blight; Payne.

Pythium aphanidermatum (Edson) Fitz., Cotton leak; Payne.

Rhizoctonia solani Kuhn, Stem canker; general.

Uromyces phaseoli typica Arth., Rust; Pittsburg, Waggoner.

Xanthomonas phaseoli (E.F.Sm.) Dowson, Bacterial blight; general with collections from Adair, Canadian, Cleveland, Grady, Kingfisher, Le Flore, Logan, Oklahoma, Okmulgee, Payne, Pittsburg, Seminole, Sequoyah, Tulsa.

Virus, Common bean mosaic no. 1; general with collections from Payne, Seminole.

PHELLODENDRON

P. AMURENSE Rupr., AMUR CORKTREE.
Cercospora sp., Leaf spot; Payne.

PHILADELPHUS

P. CORONARIUS L., SWEET MOCKORANGE.
Cercospora angulata Wint., Leaf spot; Comanche.
 P. GRANDIFLORUS Willd., BIG SCENTLESS
 MOCKORANGE.
Cercospora angulata Wint., Leaf spot; Payne.
 P. LEMOINEI Lem., LEMOINE MOCKORANGE.
Cercospora angulata Wint., Leaf spot; Payne.

PHILIBERTIA

P. CYNANCHOIDES (Decne.) A Gray.
Puccinia obliqua Berk. & Curt., Rust; Payne.

PHLEUM

P. PRATENSE L., TIMOTHY.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
 Anthracnose; Payne.
Puccinia graminis phlei-pratensis (Erikss. & Henn.)
 Stak. & Piem., Rust.

PHLOX

P. PILOSA subsp. TYPICA Wherry, DOWNTY PHLOX.
Cercospora omphakodes Ell. & Holw., Leaf spot; Murray.
 P. SP., PHLOX.
Septoria divaricata Ell. & Ev., Leaf spot; Payne.

PHOTINIA

P. SP., PHOTINIA.
Cercospora heteromeles Hark., Leaf spot; Oklahoma.

PHRAGMITES

P. COMMUNIS Trin., COMMON REED.
Scolecotrichum maculicola Ell. & Kell., Leaf spot;
 Payne.

PHRYMA

P. LEPTOSTACHYA L., AMERICAN LOPSEED.
Septoria leptostachya Ell. & Kell., Leaf spot;
 Pushmataha.

PHYSALIS

- P. ANGULATA L., CUTLEAF GROUNDCHERRY.
Entyloma australe Speg., Leaf smut; Payne.
- P. MOLLIS Nutt., VELVETY GROUNDCHERRY.
Cercospora physalidis Ell., Leaf spot; Payne.
Entyloma australe Speg., Smut; Payne.
- P. PUMILA Nutt., PRAIRIE GROUNDCHERRY.
Aecidium physalidis Burr., Rust; Osage, Payne.
- P. VIRGINIANA Mill., VIRGINIA GROUNDCHERRY.
Aecidium physalidis Burr., Rust.
- P. SP., GROUNDCHERRY.
Entyloma australe Speg., Leaf smut; Payne.

PHYSOCARPUS

- P. BRACTEATUS (Rydb.) Rehd., TWINPOD NINEBARK.
Cercospora physocarpi Ray, Leaf spot; Payne.
- P. OPULIFOLIUS (L.) Maxim., COMMON NINEBARK.
Cercospora physocarpi Ray, Leaf spot; Payne.

PHYSOSTEGIA

- P. VIRGINIANA (L.) Benth., VIRGINIA LIONSHEART.
Sclerotium rolfsii Sacc., Southern blight; Tulsa.

PHYTOLACCA

- P. AMERICANA L., COMMON POKEBERRY.
Cercospora flagellaris Ell. & Mart., Leaf spot; Osage, Payne.
Colletotrichum sp., Anthracnose; Payne.
Virus, *Phytolacca* mosaic, general with collections from McCurtain, Payne.

PICEA

- P. SP., SPRUCE.
Melampsorella cerastii (Pers.) Schroet., Rust witches' broom; Ottawa.

PINUS

- P. ECHINATA Mill., SHORTLEAF PINE.
Coleosporium ipomoeae (Schw.) Burr., Needle rust; Atoka, McCurtain.
Dothistroma pini Hulbary, Needle blight; Payne.
- P. NIGRA var. AUSTRIACA (Hoess) Aschers. & Graebn., AUSTRIAN PINE.
Dothistroma pini Hulbary, Needle blight; Oklahoma, Ottawa, Pawnee.

PINUS—Continued.

P. SPP., PINE.

Fomes sp., Wood rot; Oklahoma.*Lenzites saeparia* Wulf. ex Fr., Wood rot; Payne.*Nonparasitic*, Browning.

PIQUERIA

P. TRINERVIA Cav., FRAGRANT PIQUERIA.

Pythium sp., Root rot; Oklahoma.

PISUM

P. SATIVUM L., GARDEN PEA.

Ascochyta pisi Lib., Anthracnose; Payne.*Botrytis cinerea* Pers., Gray mold; Payne.*Erysiphe polygoni* DC., Powdery mildew; Payne, Seminole.*Pseudomonas pisi* Sackett, Bacterial blight; Muskogee, Seminole, Tulsa.*Rhizoctonia solani* Kuhn, Root rot; Payne, Tulsa.*Septoria pisi* Westd., Leaf spot; Payne.P. SATIVUM var. ARVENSE Poir., FIELD PEA:
AUSTRIAN WINTER PEA.*Ascochyta pisi* Lib., Canker; Payne.*Erysiphe polygoni* DC., Powdery mildew.*Peronospora viciae* (Berk.) DeBy., Downy mildew.*Pseudomonas pisi* Sackett, Bacterial blight; Payne.

PLANTAGO

P. ARISTATA Michx., BOTTLEBRUSH INDIANWHEAT.

Ascochyta plantaginis Sacc. & Speg., Leaf spot; Pawnee.*Uromyces peckianus* Farl., Rust; Payne.

P. HETEROPHYLLA Nutt., MANYSEEDED PLANTAIN.

Uromyces peckianus Farl., Rust.

P. MAJOR L., RIPPLESEED PLANTAIN.

Ascochyta plantaginis Sacc. & Speg., Leaf spot; Payne.*Erysiphe cichoracearum* DC., Powdery mildew; Payne.*Septoria* sp., Leaf spot; Murray.

P. PURSHII R. & S., WOOLY INDIANWHEAT.

Septoria inconspicua Berk. & Curt., Leaf spot; Kay.*Uromyces peckianus* Farl., Rust; Payne.

P. VIRGINICA L., PALESEED PLANTAIN.

Uromyces peckianus Farl., Rust; Payne.

PLATANUS

P. **OCCIDENTALIS** L., AMERICAN PLANETREE: SYCAMORE.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Custer.
Cytospora platani Fckl., Canker; Oklahoma.
Gnomonia veneta (Sacc. & Speg.) Kleb., Anthracnose & twig blight; general with collections from Adair, Comanche, Creek, Grady, Logan, Okmulgee, Payne; Tulsa, Washita.
Hypoxylon sp. Dieback; Hughes.
Microsphaera alni DC. ex Wint., Powdery mildew; Choctaw.
Mycosphaerella polymorpha D.J. Smith & C.O. Smith, Leaf spot.

PLATYCODON

P. **GRANDIFLORUM** (Jacq.) A.D.C., BALLOONFLOWER.
Botrytis sp., Blight; Kay.

POA

P. **AMPLA** Merr., BIG BLUEGRASS.
Colletotrichum graminicolum (Ces.) G.W. Wils., Anthracnose; Payne.
P. **CANBYI** (Scribn.) Piper, CANBY BLUEGRASS.
Colletotrichum graminicolum (Ces.) G.W. Wils., Anthracnose; Payne.
P. **COMPRESSA** L., CANADA BLUEGRASS.
Erysiphe graminis DC., Powdery mildew; Payne.
P. **PRATENSIS** L., KENTUCKY BLUEGRASS.
Ustilago striiformis (Westd.) Niessl, Stripe smut; Payne.

PODOPHYLLUM

P. **PELTATUM** L., COMMON MAYAPPLE.
Phyllosticta podophylli (M.A. Curt.) Wint., Leaf spot; Adair, Cherokee.
Puccinia podophylli Schw., Rust; Adair, Atoka, Cherokee, Delaware, Mayes, McCurtain.

POINCIANA

P. **GILLIESI** Hook., PARADISE POINCIANA.
Cytospora sp., Payne.
Cytosporina sp., Dieback; Payne.
Nectria cinnabarinina Tode ex Fr., Canker; Payne.

POLYGONUM

P. AVICULARE L., PROSTRATE KNOTWEED.
Erysiphe polygoni DC., Powdery mildew; Payne

P. DUMETORUM L., HEDGE KNOTWEED.
Puccinia polygoni-amphibii convolvuli (Alb. & Schw.) Arth., Rust; Muskogee.

P. HARTWRIGHTII A. Gray, KNOTWEED.
Puccinia polygoni-amphibii persicariae (Str.) Arth., Rust.

P. LAPATHIFOLIUM L., CURLTOP LADYSTHUMB.
Melanopsichium austro-americana (Speg.) G. Beck, Smut; Payne.
Puccinia polygoni-amphibii Pers., Rust; Payne.

P. PENNSYLVANICUM L., PENNSYLVANIA SMARTWEED.
Cercospora avicularis Wint., Leaf spot; Payne.
Cercospora hydropiperis (Thum.) Speg., Leaf spot; Payne.
Melanopsichium austro-americana (Speg.) G. Beck, Smut; Payne.
Septoria polygonorum Desm., Leaf spot; Payne.

P. PUNCTATUM Ell., DOTTED SMARTWEED.
Puccinia polygoni-amphibii persicariae (Str.) Arth., Rust.

P. SCANDENS L., HEDGE CORNBIND.
Puccinia polygoni-amphibii convolvuli (A. & S.) Arth., Rust; Payne.

POLYPOGON

P. MONSPELIENSIS (L.) Desf., RABBITFOOT POLYPOGON.
Erysiphe graminis DC., Powdery mildew; Murray.
Puccinia coronata Cda., Crown rust; Murray.

POPULUS

P. ALBA L., WHITE POPLAR.
Marssonina populi (Lib.) Magn., Leaf spot; Payne.

P. ALBA var. PYRAMIDALIS Bunge, BOLLEANA POPLAR.
Phyllosticta brunnea (Dearn. & House) Dearn. & Barth., Leaf spot; Payne.

P. ANGUSTIFOLIA James, NARROWLEAF POPLAR.
Melampsora albertensis Arth., Leaf rust; Payne.
Phyllosticta brunnea (Dearn. & House) Dearn. & Barth., Leaf spot; Oklahoma.

POPULUS—Continued.

P. DELTOIDES Marsh., EASTERN POPLAR: COTTONWOOD.
Cytospora chrysosperma Pers. ex Fr., Canker; Payne.
Darluca filum (Biv.) Cast., Parasitic on *Melampsora medusae* Thum.; Payne.
Melampsora medusae Thum., Rust; Payne.
Nectria cinnabarinina Tode ex Fr., Canker; Payne.
Phoradendron flavescens (Pursh) Nutt., Mistletoe; Payne.
Septoria musiva Pk., Leaf spot; Payne, Pontotoc.
Septoria populi Desm., Leaf spot; Oklahoma.

P. NIGRA var. ITALICA Muench., LOMBARDY POPLAR.
Dothichiza populea Sacc. & Briard, Branch canker; Oklahoma.

P. SARGENTII Dode, PLAINS POPLAR.
Melampsora abietis-canadensis (Farl.) Ludwig, Leaf rust; Payne.

P. SPP., POPLAR: COTTONWOOD: ASPEN.
Cytospora chrysosperma Pers. ex Fr., Canker.
Dothichiza populea Sacc. & Briard, Branch canker.
Melampsora albertensis Arth., Leaf rust; Payne.
Melampsora medusae Thum., Leaf rust; Payne.
Phaeotrype sp.; Mayes.
Phymatotrichum omnivorum (Shear) Dug., Texas root rot; Johnston.
Valsa sp., Canker; Payne.

PORTULACA

P. OLERACEA L., COMMON PURSLANE.
Albugo portulacae (DC.) O. Kuntze, White rust; Payne.

PRUNUS

P. AMERICANA Marsh., AMERICAN PLUM.
Taphrina communis (Sadeb.) Gies., Leaf hypertrophy; Mayes.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust; Payne.

P. ANGUSTIFOLIA Marsh., CHICKASAW PLUM.
Taphrina mirabilis (Atk.) Gies, Leaf blister; Muskogee, Payne.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust; Payne.

P. ARMENIACA L., APRICOT.
Coccomyces hiemalis Higgins, Leaf spot; Osage.
Monilinia fructicola (Wint.) Honey, American brown rot; general.
Phymatotrichum omnivorum (Shear) Dug., Root rot.

PRUNUS—Continued.

Xanthomonas pruni (E.F.Sm.) Dowson, Bacterial spot; general with collections from Bryan, Cherokee, Garfield, Osage.

P. BESSEYI Bailey, BESSEY CHERRY: WESTERN SAND CHERRY.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust; Payne.

P. CAROLINIANA Ait., CAROLINA LAURELCHERRY.
Cercospora sp., Leaf spot.

P. CERASUS L., SOUR CHERRY.
Coccomyces hiemalis Higgins, Leaf spot: Shot hole; Payne.
Podosphaera oxyacanthae (DC.) DeBy., Powdery mildew; Kay, Payne, Tulsa.

P. MUNSONIANA Wight & Hedr., WILDGOOSE PLUM.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust; Payne.

P. ORTHOSEPALA Koehne.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust; Payne.

P. PERSICA (L.) Batsch., PEACH.
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Bryan, Ellis, Garfield, Grady, McCurtain, Woodward.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Beckham, Cherokee.
Cephalothecium roseum Cda., Pink mold; Payne.
Cercospora persicae Sacc., Frosty mildew.
Cladosporium carpophilum Thum., Scab; Adair, Bryan, Cherokee, Delaware, Garvin, Le Flore, Logan, McCurtain, Okmulgee, Payne, Tulsa, Woods.
Clitocybe monadelphus (Morgan) Sacc., Root rot.
Coryneum beijerinckii Oud., Blight; general.
Cytospora leucostoma Sacc., Dieback: Canker; Cotton, Lincoln, Payne.
Heterodera marioni (Cornu) Goodey, Root knot; Carter, McCurtain, Oklahoma, Payne.
Monilinia fructicola (Wint.) Honey, Brown rot; Bryan, Choctaw, Cleveland, Garvin, Haskell, Le Flore, Logan, McCurtain, Muskogee, Payne, Tulsa.
Pseudomonas syringae van Hall, Bud blight: Canker: Gummosis; Grant.
Rhizopus nigricans Ehrenb. ex Fr., Fruit rot.
Stereum purpureum Pers. ex Fr., Silver leaf; Oklahoma.
Taphrina deformans (Berk.) Tul., Leaf curl; Bryan,

PRUNUS—Continued.

Carter, Choctaw, Creek, Garfield, Garvin, Grant, Hughes, Jefferson, Marshall, Mayes, Okmulgee, Osage, Payne, Sequoyah, Tulsa.
Valsa leucostoma Pers. ex Fr., Dieback; Delaware, Johnston, Lincoln, Payne.
Xanthomonas pruni (E.F.Sm.) Dowson, Bacterial blight; Adair, Bryan, Carter, Choctaw, Cleveland, Craig, Dewey, Garvin, Grady, Grant, Haskell, Lincoln, Love, Marshall, McCurtain, Muskogee, Payne, Roger Mills, Tulsa, Wagoner, Woodward.
Prunus virus 1 (Kunkel) Smith, Yellows.
Prunus virus 2 (McClint.) Smith, Rosette; Oklahoma, Payne.
Prunus virus 3 (Hutch.) Smith, Phony disease.
Prunus virus 5 (Hutch.) Smith, Mosaic; Bryan, Woods.
Nonparasitic, Hail injury; general.
Nonparasitic, Late frost injury; general.
Undetermined, Angular yellow spot; McCurtain.
Undetermined, Stipple spot; Bryan.

P. PERSICA var. NECTARINA (Ait.) Maxim., NECTARINE.
Heterodera marioni (Cornu) Goodey, Root knot; Payne.
Xanthomonas pruni (E.F.Sm.) Dowson, Bacterial leaf spot; Cleveland, Payne.

P. SEROTINA Ehrh., BLACK CHERRY.
Poria sp., Wood rot; Payne.

P. SPP., CHERRY.
Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn, Crown gall; Caddo.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Oklahoma.
Clitocybe parasitica E.M.Wilcox, Root rot; Oklahoma.
Coccomyces hiemalis Higgins, Leaf spot: shot hole; general with collections from Cleveland, Garvin, Grady, Haskell, Okfuskee, Oklahoma, Payne, Tulsa.
Dibotryon morbosum (Schw.) Theiss.& Syd., Black knot.
Monilinia fructicola (Wint.) Honey, American brown rot; general with collections from Cleveland, Garvin.
Podosphaera oxyacanthae (DC.) DeBy., Powdery mildew; general with collections from Okmulgee, Pottawatomie, Washington.
Pseudomonas syringae van Hall, Gummosis.
Schizophyllum commune Fr., Sap rot; Pontotoc.
Taphrina communis (Sadeb.) Gies., Pockets; Muskogee.
Tranzschelia pruni-spinosae (Pers.) Diet., Rust.

PRUNUS—Continued.

Valsa leucostoma Pers. ex Fr., Dieback; Canadian.

Xanthomonas pruni (E.F.Sm.) Dowson, Bacterial spot; general with collections from Creek, Nowata, Oklahoma, Osage, Pontotoc, Seminole, Tulsa.

Xylaria sp., Black root rot; Oklahoma.

Nonparasitic, Late frost injury; general.

P. SPP., PLUM.

Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Caddo, Seminole.

Armillaria mellea Vahl ex Fr., Mushroom rot; Custer.

Cladosporium carpophilum Thum., Scab; Comanche.

Clitocybe sp., Root rot; Lincoln, Oklahoma.

Coccomyces hiemalis Higgins, Leaf spot: shot hole; Caddo, Okfuskee, Payne.

Coccomyces prunophorae Higgins, Leaf spot: shot hole; Payne.

Dibotryon morbosum (Schw.) Theiss. & Syd., Black knot; general with collections from Blaine, Delaware, McCurtain, Noble, Oklahoma, Payne, Roger Mills, Woodward.

Erwinia amylovora (Burr.) Winslow et al., Fire blight; McClain, Okmulgee.

Monilinia fructicola (Wint.) Honey, American brown rot; general with collections from Adair, Bryan, Cherokee, Logan, McCurtain, Muskogee, Payne, Seminole, Tulsa.

Rhizoctonia solani Kuhn, Root rot; Cotton.

Sphaeropsis sp., Canker; Payne.

Taphrina communis (Sadeb.) Gies., Pockets; general with collections from Bryan, Carter, Custer, Garfield, Garfield, McCurtain, McIntosh, Muskogee, Ottawa, Payne, Rogers.

Tranzschelia pruni-spinosae (Pers.) Diet., Rust; general with collections from Carter, Creek, Ellis, Grady, Haskell, Okmulgee, Pawnee, Payne, Pittsburg, Pontotoc, Roger Mills.

Xanthomonas pruni (E.F.Sm.) Dowson, Bacterial spot; general with collections from Adair, Canadian, Cleveland, Creek, Grady, Haskell, Logan, Oklahoma, Ottawa, Payne, Roger Mills, Seminole.

Nonparasitic, Kelsey spot: Sunscald; general with collection from Payne.

Nonparasitic, Late frost injury; general.

P. SP.

Taphrina mirabilis (Atk.) Gies.; McIntosh.

PSORALEA

P. CUSPIDATA Pursh, TALLBREAD SCURFPEA.
Parodiella perisporioides (B.& C.) Speg., Black spot; Murray.

P. DIGITATA Nutt., DIGITATE SCURFPEA.
Cercospora psoraleae Ray, Leaf spot; Payne.
Cuscuta arvensis Beyrich, Dodder; Cleveland, Payne.

P. TENUIFLORA Pursh, SLIMFLOWER SCURFPEA.
Parodiella griffithsii Theiss.& Syd., Black spot; Payne.
Uromyces psoraleae argophyllae (Seym.) Arth., Rust; Payne.

P. TENUIFLORA var. FLORIBUNDA (Nutt.) Rydb.
Parodiella perisporioides (Berk.& Curt.) Speg., Black spot; Payne, Pottawatomie.
Uromyces psoraleae argophyllae (Seym.) Arth., Rust; Payne.

PTELEA

P. TRIFOLIATA L., COMMON HOPTREE.
Alternaria tenuis Nees ex Fr., Leaf spot; Payne.
Cercospora pteleae Wint., Leaf spot; Le Flore.
Puccinia windsoriae Schw., Rust; Payne.
Septoria pteleae Ell.& Ev., Leaf spot; Payne.

PUERARIA

P. THUNBERGIANA Benth., KUDZU.
Pseudomonas medicaginis var. *phaseolicola* (Burkh.) Stapp & Kotte; Payne.

PYCNANTHEMUM

P. PIOSUM Nutt., HAIRY MOUNTAINMINT.
Puccinia menthae Pers., Rust; Le Flore.

PYRACANTHA

P. COCCINEA var. LALANDII Dipp., LALAND FIRE-THORN.
Venturia inaequalis (Cke.) Wint., Scab; Payne.

P. SPP., FIRETHORN: PYRACANTHA.
Erwinia amylovora (Burr.) Winslow et al., Fire blight.
Fusicoccum sp., Canker.

PYRRHOPAPPUS

P. CAROLINIANUS (Walt.) DC., LEAFYSTEM FALSEDADELION.
Puccinia hieracii (Schum.) Mart., Rust; Payne, Pushmataha.

PYRRHOPAPPUS—Continued.

P. *Septoria* sp., Leaf spot; Payne.

P. **GRANDIFLORUS** Nutt., ROUGH FALSE DANDELION.

Puccinia hieracii (Schum.) Mart., Rust.

P. **MULTICAULIS** DC.

Puccinia hieracii (Schum.) Mart., Rust; Payne.

Septoria sp., Leaf spot; Payne.

PYRUS

P. **COMMUNIS** L., COMMON PEAR.

Entomosporium maculatum Lev., Leaf spot; Bryan, Garvin, Pawnee, Payne.

Erwinia amylovora (Burr.) Winslow et al., Fire blight; general with collections from Bryan, Choctaw, Creek, Garvin, Kingfisher, Le Flore, McClain, McCurtain, McIntosh, Muskogee, Noble, Nowata, Oklahoma, Pawnee, Payne, Pittsburg, Seminole, Tulsa, Washita.

Fabraea maculata (Lev.) Atk., Leaf blight; general with collections from Bryan, Garvin, Pawnee, Payne.

Gloeodes pomigena (Schw.) Colby, Sooty blotch; general with collections from Le Flore, Payne.

Mycosphaerella sentina (Fr.) Schroet., Ashy leaf spot; Haskell.

Phyllosticta solitaria Ell. & Ev., Blotch; Bryan.

Phymatotrichum omnivorum (shear) Dug., Texas root rot.

Physalospora obtusa (Schw.) Cke., Black rot; Garvin, Payne.

Septoria pyricola Desm., Leaf spot; Garfield, Haskell.

Venturia pyrina Aderh., Scab; general with collection from Le Flore.

Nonparasitic, Frost injury; Bryan.

Undetermined, Brown blotch of fruit; Creek.

QUAMOCЛИT

Q. **COCCINEA** (L.) Moench, SCARLET STARGLORY.

Albugo ipomoeae-panduranae (Schw.) Swingle, White rust; Logan.

QUERCUS

Q. **ALBA** L., WHITE OAK.

Macrophoma nervicola Ell. & Ev., Leaf spot; Le Flore.

Polyporus dryadeus Pers. ex Fr., White root rot.

Taphrina caerulescens (Desm. & Mont.) Tul., Leaf blister; Pushmataha.

Q. **COCCINEA** Muench., SCARLET OAK.

Septoria dryina Cke., Leaf spot; Payne.

QUERCUS—Continued.

Q. MACROCARPA Michx., BUR OAK.
Clitocybe tabescens (Scop. ex Fr.) Bres., Root rot.
Lenzites sp., Wood rot; Payne.
Polyporus versicolor L. ex Fr., Wood rot; Payne.
Stereum sp., Wood rot; Payne.
Valsa macrocarpa Ell. & Ev., Canker; Payne.

Q. MARILANDICA Muench., BLACKJACK OAK.
Clitocybe tabescens (Scop. ex Fr.) Bres., Root rot.
Hypoxylon atropunctatum (Schw. ex Fr.) Cke., Wood rot; Mayes, Payne.
Monochaetia desmazierii Sacc., Leaf spot; Lincoln.
Phoradendron flavescens (Pursh) Nutt., Mistletoe; McClain.
Phyllactinia corylea Pers. ex Karst., Powdery mildew; Payne.
Polyporus dryadeus Pers. ex Fr., Root & Butt rot.
Polyporus dryophilus Berk., White pocket heart rot.
Polyporus obtusus Berk., Rot; Payne.
Septoria dryina Cke., Leaf spot; Payne.
Taphrina caerulescens (Desm. & Mont.) Tul., Leaf blister; Coal, Hughes, McCurtain.

Q. MUHLENBERGII Engelm., CHINKAPIN OAK.
Actinopeltis dryina (Sacc.) Hoehn., Leaf spot; Payne.
Marssonina martini (Sacc. & Ell.) P. Magn., Leaf spot; Payne.
Microsphaera alni DC. ex Wint., Powdery mildew; Washington.

Q. NIGRA L., WATER OAK.
Gloeosporium sp., Leaf spot; Choctaw.

Q. PALUSTRIS Muench., PIN OAK.
Cytospora chrysosperma Pers. ex Fr., Twig canker; Payne.
Septoria dryina Cke., Leaf spot; Bryan.

Q. RUBRA L. (Q. falcata Michx.) SOUTHERN RED OAK.
Microsphaera alni DC. ex Wint., Powdery mildew; Atoka

Q. RUBRA f. TRILOBA (Michx.) Trel., THREELOBE RED OAK.
Phoradendron flavescens (Pursh) Nutt., Mistletoe; McClain.
Taphrina caerulescens (Desm. & Mont.) Tul., Leaf blister; McCurtain.

Q. STELLATA Wang., POST OAK.
Marssonina martini (Sacc. & Ell.) P. Magn., Leaf spot; Payne.

QUERCUS—Continued.

Microsphaera alni DC. ex Wint., Powdery mildew; Payne.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; McClain.

Phyllosticta livida Ell. & Mart., Leaf spot; Lincoln.

Q. SPP., OAK.

Coryneum kunzei Cda., Twig & branch canker: Die-back; Seminole.

Cronartium quercuum (Berk.) Miyabe, Rust; Payne.

Daedalea unicolor Bull. ex Fr., Wood rot; Payne.

Daldinia concentrica (Bolt. ex Fr.) Ces. & DeNot.; Payne.

Fomes everhartii (Ell. & Gall.) Schrenk, Trunk canker; Tulsa.

Fomes igniarius (L. ex Fr.) Kickx, White mottled heart rot.

Fomes ohiensis (Berk.) Murr., Heart rot; Payne.

Fumago vagans Pers., Sooty mold; McCurtain.

Gnomonia veneta (Sacc. & Speg.) Kleb., Anthracnose; Oklahoma.

Morenoella quercina (Ell. & Mart.) Thiess., Black Leaf spot; Delaware, McCurtain.

Mycosphaerella sp., Leaf spot; Payne.

Peniophora sp., Wood rot; Payne.

Polyporus arcularius Batsch ex Fr.; Payne.

Polyporus dichrous Fr.; Payne.

Polyporus dryadeus Pers. ex Fr., White pocket butt rot.

Polyborus gilvus (Schw.) Fr., Wood rot; Mayes, Payne.

Polyporus hirsutus Wulf. ex Fr.; Mayes. Payne.

Polyporus versicolor L. ex Fr.; Mayes.

Stereum fasciatum Schw.; Mayes.

Stereum frustulosum Pers. ex Fr., Sprout butt rot & White pocket heart rot; Payne.

Stereum lobatum (Ktze.) Fr., Wood rot.

Stereum rameale Schw.; Delaware.

Taphrina caerulescens (Des. & Mont.) Tul., Leaf blister; Hughes, Pushmataha.

Trametes septim Berk., Wood rot; Payne.

RAPHANUS

R. SATIVUS L., GARDEN RADISH.

Albugo candida (Pers. ex Lev.) Kuntze, White rust.

Aphanomyces raphani Kendrick, Black root rot; Payne.

RAPHANUS—Continued.

Pythium aphanidermatum (Edson) Fitz., Root rot; Payne.

Rhizoctonia solani Kuhn, Root rot; Tulsa.

R. SATIVUS L., WHITE ICICLE RADISH.

Aphanomyces raphani Kendrick, Black root rot; Payne.

RHAMNUS

R. CATHARTICA L., COMMON BUCKTHORN.

Sphaeropsis rhamni Cke., Leaf spot; Payne.

RHEUM

R. RHAPONTICUM L., GARDEN RHUBARB.

Alternaria sp., Storage rot; Payne.

Erwinia carotovora (Jones) Winslow et al, Soft rot; Grady.

Fusarium sp., Root rot; Beckham, Lincoln.

Heterodera marioni (Cornu) Goodey, Root knot; Kay.

Pellicularia filamentosa (Pat.) Rogers, Stem rot; Beckham.

Phytoponas rhabontica (Millard) S.A.B., Crown rot; Beckham, Kingfisher, McCurtain, Payne.

Phytophthora cactorum (L. & C.) Schroet., Crown rot; Oklahoma.

RHODODENDRON

R. NUDIFLORUM (L.) Torr., PINXTERBLOOM AZALEA.

Exobasidium vaccinii (Fckl.) Wor., Leaf gall; McCurtain.

R. SPP., RHODODENDRON.

Cercospora sp., Leaf spot; Tulsa.

Pestalotia rhododendri (Sacc.) Guba, Leaf spot; Tulsa.

Phyllosticta maxima Ell. & Ev., Leaf spot; Payne.

RHUS

R. AROMATICA Ait., FRAGRANT SUMAC.

Cercospora rhoina Cke. & Ell., Leaf spot; Payne.

R. GLABRA L., SMOOTH SUMAC.

Cercospora rhoina Cke. & Ell., Leaf spot; Payne.

R. RHOMBOIDEA Small, POISON OAK.

Pileolaria effusa Peck, Rust.

R. TOXICODENDRON L., POISON IVY.

Pileolaria toxicodendri (Berk. & Rav.) Arth., Rust; general with collection from Payne.

Septoria irregularis Pk., Leaf spot; Payne.

R. TRILOBATA Nutt., SKUNKBRUSH SUMAC.

Cercospora rhoina Cke. & Ell., Leaf spot; Payne.

Pileolaria patzcuarensis (Holw.) Arth., Rust.

RIBES

- R. AUREUM Pursh, GOLDEN CURRANT.
Phyllosticta grossulariae Sacc., Leaf spot; Murray.
- R. ODORATUM Wendl., CLOVE CURRANT.
Puccinia caricis grossulariata Arth., Rust.
Septoria ribis Desm., Leaf spot; Payne.
- R. SPP., GOOSEBERRY.
Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn, Crown gall; general with collection from Oklahoma.
Septoria ribis Desm., Leaf spot; Payne.

ROBINIA

- R. HISPIDA L., ROSEACACIA LOCUST.
Alternaria fasciculata (Cke.& Ell.) Jones & Grout, Leaf spot; Payne.
- R. PSEUDOACACIA L., BLACK LOCUST.
Clitocybe illudens Schw., Heart rot; Payne.
Fomes rimosus (Berk.) Cke., Yellow spongy heart rot.
Heterodera marioni (Cornu) Goodey, Root knot; Haskell.
Phymatotrichum omnivorum (Shear) Dug., Root rot.
Valsa sp.; Payne.

RORIPPA

- R. NASTURTIUM-AQUATICUM (L.) Schinz & Thell., WATERCRESS.
Cercospora nasturti Pass., Leaf spot; Murray.

ROSA

- R. SPP., ROSE.
Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn, Crown gall; general with collections from Logan, Oklahoma, Ottawa.
Armillaria mellea Vahl ex Fr., Mushroom root rot.
Botryosphaeria ribis (Tode ex Fr.) Gross.& Dug., Cane blight; Osage.
Botrytis cinerea Pers., Bud blight; Grady, Kingfisher, Logan, Oklahoma, Seminole.
Cercospora hyalina Mull.& Chupp, Leaf spot; Payne.
Coniothyrium fuckelii Sacc., Stem canker: Graft canker; general with collections from Le Flore, Oklahoma, Ottawa, Payne, Seminole, Tulsa, Washington.
Coryneum microstictum Berk.& Br., Canker; Delaware, Payne.

ROSA—Continued.

Cryptosporrella umbrina (Jenkins) Jenkins & Wehm., Brown canker; Rogers.

Diplocarpon rosae Wolf, Black spot; general with collections from Blaine, Caddo, Choctaw, Comanche, Creek, Grady, Haskell, Lincoln, Logan, Oklahoma, Ottawa, Pawnee, Payne, Rogers, Tulsa.

Fusarium sp., Stem rot; Caddo, Payne.

Gloeosporium rosae Halst., Anthracnose: Twig blight; Oklahoma, Payne.

Heterodera marioni (Cornu) Goodey, Root knot; Muskogee.

Phragmidium sp., Rust; Atoka, Creek.

Sphaerotheca pannosa (Wallr.) Lev., Powdery mildew; general with collections from Alfalfa, Caddo, Choctaw, Creek, Custer, Garfield, Grady, Jackson, Kay, Kiowa, Lincoln, Marshall, Noble, Nowata, Oklahoma, Okmulgee, Osage, Pawnee, Payne, Pontotoc, Pottawatomie, Seminole.

Sphaerotheca sp., Powdery mildew; Custer.

RUBUS

R. **HISPIDUS** L., SWAMP BLACKBERRY.
Kunkelia nitens (Schw.) Arth., Orange rust.

R. **IDAEUS** L., RED RASPBERRY.
Leptosphaeria coniothyrium (Fckl.) Sacc., Cane blight; Pottawatomie.
Leptothyrium pomi (Mont. & Fr.) Sacc., Fly speck, Oklahoma.
Phoma rubicola Brun., Spur blight; Oklahoma.

R. **OCCIDENTALIS** L., BLACK RASPBERRY.
Cylindrosporium rubi Ell. & Morg., Leaf spot; Pawnee.

R. **SPP., BLACKBERRY.**
Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Adair, Cherokee, Choctaw, Okmulgee, Pottawatomie.
Armillaria mellea Vahl ex Fr., Mushroom root rot; Payne.
Elsinoe veneta (Speg.) Jenkins, Anthracnose; Bryan, Cleveland, Creek, Nowata, Okmulgee, Payne, Seminole.
Gymnoconia peckiana (Howe) Trott., Orange rust; Adair, Bryan, Caddo, Le Flore, Logan, McIntosh, Okmulgee, Pawnee, Payne, Pittsburg, Pottawatomie.
Kuehneola uredinis (Lk.) Arth., Yellow rust; Oklahoma.
Kunkelia nitens (Schw.) Arth., Orange rust; Adair, Delaware, McCurtain, Payne, Tulsa.

RUBUS—Continued.

Leptosphaeria coniothyrium (Fckl.) Sacc., Cane blight; Oklahoma, Payne, Tulsa.

Mycosphaerella rubi Roark, Leaf spot; general with collections from Nowata, Oklahoma, Payne, Seminole, Washita.

Septoria rubi Westd., Leaf spot; general with collections from Adair, Bryan, Canadian, Cleveland, Nowata, Oklahoma, Payne, Seminole, Washita.

Nonparasitic, Frost injury.

R. SP., BOYSENBERRY.

Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Adair.

Coniothyrium sp., Cane canker; Adair.

Elsinoe veneta (Speg.) Jenkins, Anthracnose; Adair, Bryan, Choctaw, Haskell.

Gloeosporium sp., Anthracnose; Adair.

Kunkelia nitens (Schw.) Arth., Orange rust; Tulsa.

Mycosphaerella sp., Leaf spot; Adair.

R. SP. DEWBERRY.

Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; Lincoln.

Elsinoe veneta (Speg.) Jenkins, Anthracnose; general with collections from Adair, Beckham, Bryan, Choctaw, Garvin, Haskell, Payne, Pittsburg, Seminole.

Mycosphaerella rubi Roark, Leaf spot; Major, Seminole.

Septoria rubi Westd., Leaf spot; Grady, Major, Seminole.

R. SP., LOGANBERRY.

Mycosphaerella rubi Roark, Leaf spot; Payne.

R. SP., RASPBERRY.

Agrobacterium tumefaciens (E.F.Sm. & Town.) Conn, Crown gall; general.

Coniothyrium fuckelii Sacc., Cane blight: Graft canker; Carter.

Cylindrosporium rubi Ell. & Morgan, Leaf spot; Grady, Tulsa.

Elsinoe veneta (Speg.) Jenkins, Anthracnose; Muskogee, Okmulgee, Pottawatomie.

Gymnoconia peckiana (Howe) Trott., Orange rust; general with collection from Okmulgee.

Mycosphaerella rubi Roark, Leaf spot; Oklahoma, Payne, Pittsburg.

Virus, Mosaic & Leaf curl; general.

Nonparasitic, Frost injury; general.

RUBUS—Continued.

R. SP., YOUNGBERRY.

Coniothyrium sp., Cane canker; Creek.*Gloeosporium* sp., Anthracnose; Oklahoma.*Mycosphaerella rubi* Roark, Leaf spot; Creek, Seminole.

RUDBECKIA

R. AMPLEXICAULIS Vahl, CLASPING CONEFLOWER.

Cuscuta arvensis Beyrich, Dodder; Pottawatomie.*Erysiphe cichoracearum* DC., Powdery mildew; Payne.

R. HIRTA L., BLACKKEYEDSUSAN.

Plasmopara halstedii (Farl.) Berl. & DeToni, Downy mildew; Murray.*Septoria rudbeckiae* Ell. & Halst., Leaf spot; Murray.

RUELLIA

R. STREPENS L., LIMESTONE RUELLIA.

Cercospora consociata Wint., Leaf spot; Payne.

RUMEX

R. ALTISSIMUS Wood, PALE DOCK.

Phyllosticta circuligerens Tehon & Daniels, Leaf spot; Payne.*Septoria rumicis* Ell., Leaf spot; Payne.

R. CRISPUS L., CURLY DOCK.

Colletotrichum erumpens Sacc., Anthracnose; Seminole.*Ramularia obovata* Fckl., Leaf spot; Payne.

R. HASTATUS Baldw., HEARTWING SORREL.

Ramularia obovata Fckl., Leaf spot; Payne.

R. VENOSUS Pursh, VEINY DOCK.

Puccinia phragmitis (Schum.) Korn., Rust.*Ramularia obovata* Fckl., Leaf spot; Payne.

SABATIA

S. CAMPESTRIS Nutt., PRAIRIE ROSEGENTIAN.

Cercospora sabbatiae Ell. & Ev., Leaf spot; Cleveland, Pawnee, Payne.*Gloeosporium* sp., Anthracnose; Payne.

SALIX

S. DISCOLOR Muhl., PUSSYWILLOW.

Dothiorella ribis (Fckl.) Sacc., Branch canker; Oklahoma.*Macrophoma* sp., Branch canker; Payne.

SALIX—Continued.

- S. INTERIOR Rowlee, SANDBAR WILLOW.
Melampsora abieti-capraearum Tub., Leaf rust; Payne.
- S. LONGIPES Shuttlew., COASTALPLAIN WILLOW.
Melampsora abieti-capraearum Tub., Leaf rust.
- S. NIGRA Marsh., BLACK WILLOW.
Melampsora abieti-capraearum Tub., Leaf rust.
- S. SPP., WILLOW.
Coryneum sp., Leaf spot; Oklahoma.
Cylindrosporium salicinum (Pk.) Dearn., Leaf spot; Oklahoma, Payne, Tulsa.
Cytospora chrysosperma Pers. ex Fr., Canker; Nowata, Payne, Wagoner.
Marssonina populi (Lib.) Magn., Leaf spot; Muskogee, Payne.
Melampsora bigelowii Thum., Rust; Harper, Muskogee, Ottawa, Payne.

SALVIA

- S. AZUREA Lam., AZURE SAGE.
Cercospora salviicola Tharp, Leaf spot; Payne.
- S. LANCEOLATA Willd., LANCELEAF SAGE.
Puccinia caulincola T. & G., Rust.
- S. PITCHERI Torr., PITCHERS SAGE.
Puccinia farinacea Long, Rust.

SAMBUCUS

- S. CANADENSIS L., AMERICAN ELDER.
Heterosporium sambuci Earle; Payne.
Septoria sambucina Pk., Leaf spot; Payne.
- S. SP., ELDER.
Alternaria sp., Leaf spot.
Cercospora catenospora Atk., Leaf spot.

SAPINDUS

- S. DRUMMONDII Hook. & Arn., WESTERN SOAPBERRY.
Cylindrosporium griseum Heald & Wolf., Leaf blight; Payne.
Phymatotrichum omnivorum (Shear) Dug., Root rot.

SASSAFRAS

- S. ALBIDUM (Nutt.) Nees, COMMON SASSAFRAS.
Phyllosticta sassafras Cke., Leaf spot; Delaware.

SCIRPUS

- S. AMERICANUS Pers., AMERICAN BULRUSH.
Puccinia obtecta Peck, Rust.

SCROPHULARIA

S. MARILANDICA L., MARYLAND FIGWORT.
Cylindrosporium scrophulariae Sacc. & Ell., Leaf spot; Cherokee.

SCUTELLARIA

S. INTEGRIFOLIA L., HYSSOP SKULLCAP.
Septoria scutellariae Thum., Leaf spot; Pushmataha.
 S. PARVULA Michx., SMALL SKULLCAP.
Septoria scutellariae Thum., Leaf spot; Payne.

SECALE

S. CEREALE L., RYE.
Claviceps purpurea (Fr.) Tul., Ergot; general.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; general with collection from Payne.
Darluca filum (Biv.) Cast., Parasitic on *Puccinia rubigo-vera secalis* (Erikss.) Carl. on living leaves; Payne.
Erysiphe graminis DC., Powdery mildew; general.
Gibberella zaeae (Schw.) Petch, Scab.
Ophiobolus graminis Sacc., Take all; Ottawa.
Puccinia graminis Pers., Stem rust; general.
Puccinia rubigo-vera secalis (Erikss.) Carl., Leaf rust; general with collections from Bryan, Payne.
Urocystis occulta (Wallr.) Rabh., Flag smut; general with collection from Oklahoma.
Ustilago tritici (Pers.) Rostr., Loose smut.

SETARIA

S. ITALICA (L.) Beauv., FOXTAIL MILLET.
Helminthosporium turicum Pass., Leaf stripe; Virus, Mosaic; Payne.
 S. LUTESCENS (Weigel) Hubb., YELLOW BRISTLE-GRASS.
Bacterium sp., Bacterial leaf spot; Payne.
Cercospora setariicola Tehon & Daniels, Leaf spot; Cleveland.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Piricularia grisea (Cke.) Sacc., Gray leaf spot; Murray.

SILENE

S. ANTIRRHINA L., SLEEPY SILENE.
Ascochyta silenes Ell. & Ev., Leaf spot; Delaware.
Septoria sp., Leaf spot; Payne.

SISYMBRIUM

S. ALTISSIMUM L., TUMBLE MUSTARD.
Albugo candida (Pers. ex Lev.) Kuntze, White rust;
 Payne.

SISYRINCHIUM

S. GRAMINEUM Curtis, BLUE-EYEDGRASS.
Aecidium residuum Arth., Rust; Garfield.

SMILACINA

S. RACEMOSA (L.) Desf., FEATHER SOLOMONPLUME:
 FALSE SPIKENARD.
Puccinia sessilis Schneid., Rust; McCurtain.

SMILAX

S. BONA-NOX L., SAW GREENBRIER.
Cercospora smilacina Sacc., Leaf spot; Payne.
Dothiorella smilacina (Pk.) Petr. & Syd., Leaf spot;
 Payne.
Puccinia amphigena Diet., Rust; Payne.
Puccinia smilacis Schw., Rust; Payne.

S. GLAUCIA Walt., CAT GREENBRIER.
Dorthiorella smilacina (Pk.) Petr. & Syd., Leaf spot;
 Payne.
Phyllosticta smilacis Ell. & Mart., Leaf spot; Payne.
Puccinia smilacis Schw., Rust; Payne.

S. HERBACEA L., CARRIONFLOWER GREENBRIER.
Puccinia amphigena Diet., Rust; McCurtain.

S. HISPIDA Muhl., BRISTLY GREENBRIER.
Phyllosticta sp., Leaf spot; Payne.

S. LANCEOLATA L., LANCELEAF GREENBRIER.
Phyllosticta sp., Leaf spot; McCurtain.

S. PSEUDO-CHINA L., LONG-STALKED GREENBRIER.
Cercospora smilacina Sacc., Leaf spot; Payne.

S. ROTUNDIFOLIA L., COMMON GREENBRIER.
Dothiorella smilacina (Pk.) Petr. & Syd., Leaf spot;
 Payne.
Puccinia smilacis Schw., Rust.

S. SPP., GREENBRIER.
Colletotrichum smilacis Tehon, Anthracnose; Murray.
Gloeosporium cingulatum Atk., Leaf spot; Murray.
Puccinia smilacis Schw., Rust; Creek, Delaware, Le
 Flore, Payne.

SOJA**S. MAX (L.) Piper, SOYBEAN.**

Cercospora sojina Hara, Leaf spot; Delaware, Payne.
Colletotrichum glycines Hori, Anthracnose; Payne, Tulsa.

Diaporthe phaseolorum var. *sojae* (Lehm.) Wehm., Pod & stem blight; Delaware, Muskogee, Payne.

Fusarium oxysporum f. *tracheiphilum* (E.F.Sm.) Snyder & Hansen, Wilt; Muskogee, Payne.

Glomerella glycines (Hori) Lehm. & Wolf, Anthracnose; Payne.

Macrophomina phaseoli (Maubl.) Ashby, Ashy stem blight; Payne.

Nematospora coryli Peglion, Yeast spot; Payne.

Peronospora manshurica (Naoum.) Syd., Downy mildew; Okmulgee.

Phymatotrichum omnivorum (Shear) Dug., Texas root rot; Marshall.

Pseudomonas glycinea (Coerper) Stapp, Bacterial blight; Craig, Delaware, Muskogee, Okmulgee, Payne.

Pseudomonas tabaci (Wolf & Foster) Stapp, Wildfire; Payne.

Sclerotium bataticola Taub., Charcoal rot; Craig, Delaware, Muskogee, Payne, Tulsa.

Xanthomonas phaseoli var. *sojense* (Hed.) Starr & Burkholder, Bacterial pustule; Craig, Creek, Delaware, Muskogee, Okmulgee, Payne.

Virus, Mosaic; Payne.

SOLANUM**S. CAROLINENSE L., CAROLINA HORSENETTLE.**

Phoma terrestris Hansen, Stem canker; Payne.

S. MELONGENA L., GARDEN EGGPLANT.

Bacterium solanacearum E.F.Sm., Bacterial wilt; Payne.

Colletotrichum atramentarium (Berk. & Br.) Taub., Anthracnose.

Phomopsis vexans (Sacc. & Syd.) Harter, Fruit rot; Payne.

S. TUBEROSUM L., POTATO.

Actinomyces scabies (Thax.) Guss., Scab; Haskell, Hughes, Le Flore, McIntosh, Muskogee, Okfuskee, Oklahoma, Okmulgee, Payne, Pittsburg, Seminole, Sequoyah, Wagoner.

SOLANUM—Continued.

Alternaria solani (Ell. & Mart.) Jones & Grout, Early blight; general with collections from Choctaw, Haskell, Le Flore, McCurtain, McIntosh, Oklahoma, Payne, Seminole, Tulsa.

Bacterium solanacearum E.F.Sm., Bacterial wilt; Craig.

Cephalobus sp., Nematode; Okfuskee.

Colletotrichum atramentarium (Berk. & Br.) Taub., Anthracnose; Creek.

Corynebacterium sepedonicum (Speick. & Kotth.) Skapt., Bacterial ring rot.

Erwinia carotovora (Jones) Winslow et al., Soft rot & Blackleg; general with collections from Caddo, Craig, Hughes, Le Flore, Oklahoma, Okmulgee, Pottawatomie, Seminole, Sequoyah, Texas.

Fusarium oxysporum Schl., Wilt; general with collections from Bryan, Creek, Haskell, Seminole.

Fusarium solani f. *eumartii* (Carp.) Snyder & Hansen, Dry rot: End rot; general with collections from Caddo, Muskogee, Seminole, Sequoyah, Tulsa.

Helicobasidium purpureum (Tul.) Pat., Violet root rot; Oklahoma.

Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Creek, Haskell, Johnston, Okfuskee.

Pellicularia filamentosa (Pat.) Rogers, Stem rot; Choctaw, Seminole.

Phytophthora sp., Pink rot; Muskogee.

Rhizoctonia solani Kuhn, Stem rot; general with collections from Bryan, Choctaw, Haskell, Okfuskee, Oklahoma, Payne, Seminole.

Sclerotium bataticola Taub., Charcoal rot; Payne.

Sclerotium rolfsii Sacc., Southern blight; Okfuskee.

Spongospora subterranea (Wallr.) Johnson, Powdery scab; Oklahoma, Payne.

Virus, Leaf roll; general with collection from Choctaw.

Virus, Mild mosaic; general with collections from Choctaw, McCurtain.

Virus, Purple top wilt; Choctaw.

Virus, Rugose mosaic; general with collection from Le Flore.

Virus, Spindle tuber; general.

Virus, Witches broom.

Nonparasitic, Enlarged lenticels.

Nonparasitic, Hair sprout.

SOLANUM—Continued.

Nonparasitic, Hollow heart: Black heart; general.
Nonparasitic, Tipburn; general with collection from Seminole.

SOLIDAGO

S. GIGANTEA var. LEIOPHYLLA Fern., NOVEMBER GOLDENROD.
Coleosporium solidaginis (Schw.) Thum., Rust.
S. GRAMINIFOLIA (L.) Salisb., GRASSLEAF GOLDENROD.
Cuscuta arvensis Beyrich., Dodder; Muskogee.
S. SPP., GOLDENROD.
Coleosporium solidaginis (Schw.) Thum., Rust; Lincoln, Payne.
Cuscuta compacta Juss., Dodder; Greer.
Cuscuta cuspidata Engelm., Dodder; Cleveland, Greer.
Septoria sp., Leaf spot; Payne.

SONCHUS

S. ASPER (L.) Hill, PRICKLY SOWTHISTLE.
Alternaria sonchi J. J. Davis, Leaf blight; Payne.
Erysiphe cichoracearum DC., Powdery mildew; Payne.

SOPHORA

S. AFFINIS Torr. & Gray, TEXAS SOPHORA.
Corticium sp., Murray.
Macrophoma sp.; Murray.
S. JAPONICA L., JAPANESE PAGODATREE.
Nectria cinnabarina Tode ex Fr., Twig blight; Payne.

SORBUS

S. AMERICANA Marsh., AMERICAN MOUNTAINASH.
Phyllosticta sorbi Westd., Leaf spot; Washington.

SORGHASTRUM

S. NUTANS (L.) Nash, YELLOW INDIANGRASS.
Cerebella andropogonis Ces., Blackhead: False smut; Lincoln, Payne, Pittsburg.
Claviceps sp., Ergot; Lincoln, Payne.
Ellisiella caudata (Pk.) Sacc., Leaf spot; Payne.
Phyllosticta sp., Leaf spot; Payne.
Puccinia virgata Ell. & Ev., Rust; Payne.
Stagonospora sp., Leaf spot; Payne.

SORGHUM

S. HALEPENSE (L.) Pers., JOHNSONGRASS.
Cercospora sorghi Ell. & Ev., Leaf spot; Seminole.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Murray, Payne.
Helminthosporium turicum Pass., Leaf blight; Payne,
Seminole.
Monascus purpureus Went, Mold; Payne.
Pseudomonas syringae van Hall, Leaf spot; Woodward.
Puccinia purpurea Cke., Rust; Payne, Stephens,
Woods, Woodward.
Sphacelotheca cruenta (Kuhn) Potter, Loose kernel
smut; Marshall, Muskogee, Payne, Seminole, Stephens.
Sphacelotheca sorghi (Link) Clint., Covered kernel
smut; Carter, Cleveland, Marshall, Payne. Seminole.
Titaeospora sorghi (Ell. & Ev.) Olive, ined. (*Septorella*
sorghi Ell. & Ev.), Leaf spot; Murray, Payne.
Xanthomonas holcicola (Ell.) Starr & Burkh., Bac-
terial streak; Oklahoma.

S. VULGARE Pers., SORGHUM.
Alternaria sp., Leaf spot; Alfalfa, Payne.
Ascochyta sorghina Sacc., Leaf spot; Garvin.
Aspergillus niger Van Tiegh., Mold; general with col-
lections from Comanche, Kay, Payne.
Cephalothecium sp., Leaf spot; Alfalfa.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Custer, Garvin, McClain, Payne.
Fusarium spp., Root & stalk rots; Alfalfa, Comanche,
Grady, Payne, Woodward.
Helminthosporium sp., Root rot; Comanche, Payne,
Seminole, Woodward.
Nigrospora sphaerica (Sacc.) Mason, Kernel rot; Payne.
Phoma sp., Root rot; Woodward.
Pseudomonas alboprecipitans Rosen; Payne.
Pseudomonas andropogoni (E.F.Sm.) Stapp, Bacterial
stripe; Alfalfa, Canadian, Cotton, Garfield, Harper,
Hughes, Johnston, Muskogee, Payne, Seminole,
Tillman, Woods, Woodward.
Pseudomonas syringae van Hall, Bacterial eye spot;
Adair, Alfalfa, Bryan, Canadian, Cherokee, Cotton,
Delaware, Garfield, Garvin, Harper, Hughes, John-
ston, Le Flore, Muskogee, Payne, Seminole, Se-
quoyah, Tillman, Woods, Woodward.
Puccinia purpurea Cke., Rust; Comanche, Payne,
Rogers, Seminole, Woodward.

SORGHUM—Continued.

Pythium arrhenomanes Elliot, Milo disease; Canadian, Delaware, Hughes, Nowata, Payne, Woodward.

Sclerotium bataticola Taub., Charcoal rot; general with

collections from Comanche, Hughes, Payne, Woodward.

Sphacelotheca cruenta (Kuhn) Potter, Loose kernel smut; Payne.

Sphacelotheca reiliana (Kuhn) Clint., Head smut.

Sphacelotheca sorghi (Lk.) Clint., Covered kernel smut; Adair, Bryan, Cherokee, Comanche, Craig, Delaware, Garfield, Johnston, Kiowa, Le Flore, Lincoln, Mayes, Muskogee, Nowata, Payne, Seminole, Sequoyah, Texas, Washita, Woodward.

Titaeospora sorghi (Ell. & Ev.) Olive, ined. (*Septorella sorghi* Ell. & Ev.), Leaf spot; Bryan, Payne.

Xanthomonas holcicola (Ell.) Starr & Burkh., Bacterial streak; Alfalfa, Canadian, Cotton, Garfield, Harper, Hughes, Payne, Woods, Woodward.

Nonparasitic, Iron deficiency; Ellis, Payne, Washita.

S. VULGARE var. SUDANENSE (Piper) Hitchc., SUDAN-GRASS.

Fusarium sp., Red root rot.

Helminthosporium sp., Root rot; Seminole.

Sclerotium bataticola Taub., Charcoal rot.

S. VULGARE var. TECHNICUM (Koern.) Jav., BROOM-CORN.

Colletotrichum graminicolum (Ces.) G.W.Wils.,

Anthracnose; Garvin, McClain, Payne, Stephens.

Fusarium moniliforme Sheld., Pink rot; Stephens.

Sclerotium bataticola Taub., Charcoal rot; McClain, Payne, Woodward.

Titaeospora sorghi (Ell. & Ev.) Olive, ined. (*Septorella sorghi* Ell. & Ev.), Leaf spot; Garvin, Payne.

SPARTINA

S. GRACILIS Trin., ALKALI CORDGRASS.

Puccinia peridermiospora (Ell. & Tr.) Arth., Rust.

S. PECTINATA Link, PRAIRIE CORDGRASS.

Puccinia peridermiospora (Ell. & Tr.) Arth., Rust; general with collection from Payne.

Puccinia seymouriana Arth., Rust; Craig.

SPECULARIA

S. BIFLORA (R. & P.) Fisch. & Mey., SMALL VENUS-LOOKINGGLASS.

Septoria speculariae Berk. & Curt., Leaf spot; Payne.

SPECULARIA—Continued.

S. *PERFOLIATA* (L.) A. DC., CLASPING VENUSLOOK-
INGGLASS.

Septoria speculariae Berk. & Curt., Leaf spot; Dela-
ware, Payne.

SPHAERALCEA

S. *COCCINEA* (Pursh) Rydb., SCARLET GLOBE-
MALLOW.

Puccinia sherardiana Korn., Rust.

SPHENOPHOLIS

S. *INTERMEDIA* Rydb., SLENDER WEDGESCALE.
Ascochyta graminicola Lib., Leaf spot; Delaware.

S. *OBTUSATA* (Michx.) Scribn., PRAIRIE WEDGE-
SCALE.

Puccinia eatoniae Arth., Rust.

SPINACIA

S. *OLERACEA* L., SPINACH.

Albugo occidentalis Wilson, White rust; Le Flore,
Muskogee, Sequoyah, Wagoner.

Cercospora sp., Leaf spot; Seminole.

Heterodera marioni (Cornu) Goodey, Root knot; Mus-
kogee, Tulsa.

Heterosporium variabile Cke., Leaf spot; Haskell,
Le Flore, Muskogee, Sequoyah, Tulsa, Wagoner.

Macrosporium cheiranthi (Lib.) Fr., Leaf spot; Mus-
kogee.

Peronospora effusa (Grev.) Rabh., Downy mildew:
Blue mold; Haskell, Le Flore, McIntosh, Muskogee,
Sequoyah, Tulsa, Wagoner.

Virus, Cucumber mosaic virus; Le Flore, Muskogee.

Virus, Curly top; Le Flore, Muskogee.

SPIRAEA

S. *JAPONICA* L. f., JAPANESE SPIREA.

Cercospora physocarpi Ray, Leaf spot; Payne.

SPOROBOLUS

S. *AIROIDES* (Torr.) Torr., ALKALI SACATON.
Puccinia luxuriosa Syd., Rust.

S. *ASPER* (Michx.) Kunth, TALL DROPSEED.
Chaetomella atra Fckl.; Tulsa.

Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Hughes.

Puccinia vilfae Arth. & Holw., Rust.

SPOROBOLUS—Continued.

S. ASPER var. HOOKERI (Trin.) Vasey, MEADOW TALL DROPSEED.
Selenophoma sp.; Payne.

S. CLANDESTINUS (Spreng.) Hitchc., HIDDEN DROPSEED.
Cercospora seriata Atk., Leaf spot; Payne.
Septoria sp., Leaf spot; Payne.

S. CRYPTANDRUS (Torr.) A. Gray, SAND DROPSEED.
Phyllachora vulgata Theissen & Sydow, Black spot; Grady.
Puccinia simulans (Peck) Barth., Rust.

S. HETEROLEPIS A. Gray, PRAIRIE DROPSEED.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Osage.

S. NEGLECTUS Nash, PUFFSHEATH DROPSEED.
Puccinia vilfae Arth. & Holw., Rust; Payne.

S. VAGINIFLORUS (Torr.) Wood, POVERTY DROPSEED.
Chaetomella atra Fckl.; Payne.
Selenophoma sp., Payne.

STAPELIA

S. SP., CARRIONFLOWER.
Diplodia sp.; Payne.

STAPHYLEA

S. TRIFOLIA L., AMERICAN BLADDERNUT.
Cercospora staphyleae Ray & McLaughlin, Leaf spot; Payne.

STELLARIA

S. MEDIA (L.) Cyrill., CHICKWEED.
Synchytrium stellariae Fckl.; Payne.

STENOSIPHON

S. LINIFOLIUS (Nutt.) Britton, FLAXLEAF STENOSIPHON.
Cercospora sp., Leaf spot; Murray.

STILLINGIA

S. SYLVATICA L., QUEENSDELIGHT STILLINGIA.
Cuscuta sp., Dodder; Muskogee.
Uromyces graminicola Burr., Rust; Beaver, Payne.

STIPPA

S. COMATA Trin., NEEDLEANDTHREAD.
Ustilago minima Arth., Smut; Payne, Woodward.

STROPHOSTYLES

S. HELVOLA (L.) Britton, TRAILING WILDBEAN.
Phylosticta phaseolina Sacc., Leaf spot; Payne, Pittsburg.
Uromyces phaseoli strophostylis (Pers.) Arth., Rust; Lincoln, Payne, Seminole.

S. PAUCIFLORA (Benth.) S. Wats., SMALL WILDBEAN.
Ascochyta sp., Leaf spot; Payne.
Erysiphe polygoni DC., Powdery mildew; Ottawa.
Uromyces phaseoli strophostylis (Pers.) Arth., Rust; Logan, Payne, Tulsa.

SYMPHORICARPOS

S. ORBICULATUS Moench, INDIANCURRANT CORALBERRY.
Microsphaera diffusa Cke. & Pk., Powdery mildew; Major, Murray, Payne.
Puccinia crandallii Pam. & Hume, Rust; Delaware.
S. SP., SNOWBERRY.
Phylosticta symphoricarpi Westd., Leaf spot; Payne.

SYRINGA

S. PERSICA L., PERSIAN LILAC.
Microsphaera alni DC. ex Wint., Powdery mildew; Payne.

S. VULGARIS L., COMMON LILAC.
Cercospora macromaculans Heald & Wolf, Leaf spot.
Cladosporium herbarum Lk., Leaf blotch, Payne, Tulsa.
Microsphaera alni DC. ex Wint., Powdery mildew; Grady, Payne, Pontotoc.
Phylosticta syringae West., Leaf spot; Pittsburg.
Sphaeropsis syringae Pk. & Clint., Payne.
Stereum purpureum Pers., Wood rot.

TARAXACUM

T. OFFICINALE Weber, COMMON DANDELION.
Puccinia hieracii (Schum.) Mart., Rust; Payne.

TEPHROSIA

T. VIRGINIANA (L.) Pers., VIRGINIA TEPHROSIA.
Ravenelia epiphylla (Schw.) Diet., Rust; Craig.

TETRAGONIA

T. EXPANSA Murr., NEW ZEALAND SPINACH.
Alternaria sp., Leaf spot; Woodward.

TEUCRIUM

T. CANADENSE L., AMERICAN GERMANDER.
Cercospora teucrii Ell. & Kell., Leaf spot; Payne.
Peronospora sp., Downy mildew; Payne.

THUJA

T. OCCIDENTALIS L., EASTERN ARBORVITAE.
Alternaria sp., Leaf blotch; Muskogee.
Coryneum thujinum Dearn., Twig blight; Kay,
Muskogee.
Cytospora sp., Canker; Muskogee, Pittsburg.
Mycosphaerella thujae Petr., Leaf spot; Okmulgee.
Pestalotia funerea Desm., Twig blight; Kay, Payne.
Phomopsis juniperovora G. Hahn, Nursery blight;
Payne.
Nonparasitic, Drought & Sun scald.

TILIA

T. AMERICANA L., AMERICAN LINDEN: BASSWOOD.
Cercospora tragopanis Ell. & Ev., Leaf spot; Payne.

TITHONIA

T. ROTUNDIFOLIA (Mill.) Blake, SCARLET TITHONIA.
Alternaria sp., Leaf spot; Payne.

TRAGIA

T. NEPETAEFOLIA Cav., CATNIP-LEAVED TRAGIA.
Cuscuta coryli Engelm., Dodder; Greer.

TRAGOPOGON

T. PORRIFOLIUS L., VEGETABLE-OYSTER SALSIFY.
Cercospora tragopogonis Ell. & Ev., Leaf spot; Payne.
Erysiphe cichoracearum DC., Powdery mildew; Payne.
Heterodera marioni (Cornu) Goodey, Root knot.

TRIBULUS

T. TERRESTRIS L., PUNCTUREVINE.
Cuscuta cuspidata Engelm., Dodder; Grady.
Phyllosticta sp., Leaf spot; Jackson.

TRIFOLUM

- T. CAROLINIANUM Michx., CAROLINA CLOVER.
Uromyces elegans (Berk.) Lagerh., Rust; Delaware, Le Flore, Mayes, McCurtain, Payne, Pushmataha.
- T. HYBRIDUM L., ALSIKE CLOVER.
Cercospora zebrina Pass., Leaf spot; McCurtain.
- T. PRATENSE L., RED CLOVER.
Uromyces trifolii fallens (Desm.) Arth., Rust.
- T. PROCUMBENS L., LOW HOP CLOVER.
Uromyces elegans (Berk.) Lagerh., Rust; Le Flore.
- T. SPP., CLOVER.
Colletotrichum trifolii Bain, Anthracnose.
Erysiphe polygoni DC., Powdery mildew.
Pseudopeziza trifolii (Bernh.) Fckl., Leaf spot.
Sclerotinia trifoliorum Erikss., Root rot.

TRILLIUM

- T. RECURVATUM Beck, PRAIRIE TRILLIUM.
Septoria trillii Pk., Leaf spot; Adair, Cherokee.

TRIODIA

- T. ALBESCENS Vasey, WHITE TRIODIA.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Payne.
- T. ELONGATA (Buckl.) Scribn., ROUGH TRIODIA.
Colletotrichum graminicolum (Ces.) G.W.Wils., Anthracnose; Tulsa.
- T. FLAVA (L.) Smyth, PURPLETOP: TALL REDTOP.
Dothichloe atramentosa (B.& C.) Atk., Black crust; Lincoln.
Puccinia windsoriae Schw., Rust; Payne.
Selenophoma sp., Leaf spot; Payne.
Ustilago tricuspidis Ell.& Gall., Smut; Pittsburg.
- T. STRICTA (Nutt.) Benth., LONGSPIKE TRIODIA.
Selenophoma sp., Leaf spot; Payne.

TRIOSETUM

- T. PERFOLIATUM L., COMMON HORSEGENTIAN.
Cylindrosporium trioseti Kell.& Swingle, Leaf spot; Delaware.

TRIPLASIS

- T. PURPUREA (Walt.) Chapm., PURPLE SANDGRASS.
Puccinia schedonnardi Kell.& Swingle, Rust; Payne.

TRIPSACUM

T. DACTYLOIDES L., EASTERN GAMAGRASS.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Kay, Payne.

TRITICUM

T. AESTIVUM L., WHEAT.
Cladosporium sp., Mold; Alfalfa.
Claviceps purpurea (Fr.) Tul., Ergot.
Colletotrichum graminicolum (Ces.) G.W.Wils.,
Anthracnose; Grant.
Curvularia spicifera (Bainier) Boedijn, Foot rot;
Woodward.
Erysiphe graminis DC., Powdery mildew; Payne.
Fusarium spp., Foot rot; Root rot; general with collections
from Alfalfa, Canadian, Cimarron, Garfield.
Gibberella zaeae (Schw.) Petch, Scab; general with collections
from Delaware, Garfield, Payne, Seminole,
Tillman.
Helminthosporium sativum Pam., King, & Bakke, Foot
rot; Alfalfa, Blaine, Caddo, Canadian, Ellis, Garfield,
Harper, Kay, Kingfisher, Kiowa, Logan, Noble, Nowata,
Payne, Pittsburg, Seminole, Tulsa, Woods.
Helminthosporium spp., Leaf spot; Alfalfa, Cimarron.
Heterosporium sp., Glume blotch; Custer.
Pseudomonas atrofaciens (McCul.) Stapp, Basal glume
rot.
Puccinia graminis tritici Erikss. & Henn., Stem rust;
general with collections from Beckham, Delaware,
Dewey, Garvin, Kay, Kiowa, Logan, Mayes, McClain,
Noble, Pawnee, Payne, Seminole, Woods,
Woodward.
Puccinia rubigo-vera tritici (Erikss. & Henn.) Carleton,
Leaf rust; general with collections from Blaine,
Canadian, Choctaw, Custer, Delaware, Garfield, Grady,
Harper, Kingfisher, Le Flore, Lincoln, Logan, Noble,
Oklahoma, Osage, Payne, Seminole, Tulsa, Wagoner,
Woods, Woodward.
Pythium sp., Root rot; Cimarron.
Rhizoctonia sp., Root rot; Blaine, Canadian, Texas,
Woodward.
Septoria nodorum Berk., Glume blotch; Payne.
Septoria tritici Desm., Speckled leaf blotch; general
with collections from Canadian, Custer, Garfield,
Grant, Kingfisher, Payne, Seminole, Tulsa.

TRITICUM—Continued.

Stemphylium tritici Patterson.

Tilletia caries (DC.) Tul., Rough spored bunt; general with collection from Payne.

Tilletia foetida (Wallr.) Liro, Smooth spored bunt; general with collections from Payne.

Ustilago tritici (Pers.) Rostr., Loose smut; general with collections from Caddo, Canadian, Comanche, Kingfisher, Kiowa, Noble, Payne, Seminole, Wagoner.

Xanthomonas translucens f. sp. *undulosa* (E.F.Sm., L.R. Jones, & Reddy) Hagh., Black chaff; Delaware, Grady, Muskogee, Oklahoma, Payne, Seminole, Tulsa, Washita, Woods.

Virus, Mosaic; Payne.

T. DICOCCEUM Schrank, EMMER.

Puccinia graminis tritici Erikss. & Henn., Stem rust.

T. SPELTA L., SPELT.

Alternaria sp., Mold; general with collection from Canadian.

Puccinia graminis tritici Erikss. & Henn., Stem rust.

Puccinia rubigo-vera tritici (Erikss. & Henn.) Carleton, Leaf rust.

TROPAEOLUM

T. MAJUS L., COMMON NASTURTIUM.

Pleospora tropaeoli Halst., Leaf spot; Payne.

TULIPA

T. SPP., TULIP.

Aspergillus sp., Bulb rot; Oklahoma.

Botrytis tulipae (Lib.) E.F.Hopkins, Botrytis blight.

Fusarium sp., Bulb rot; Oklahoma.

Penicillium sp., Bulb rot; Oklahoma.

TYPHA

T. LATIFOLIA L., COMMON CATTAIL.

Cladosporium fasciculatum Cda.; Payne.

ULMUS

U. ALATA Michx., WINGED ELM: WAHOO.

Gloeosporium inconspicuum Cav., Leaf spot; Seminole.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; McClain.

Uncinula macrospora Pk., Powdery mildew; Atoka.

U. AMERICANA L., AMERICAN ELM.

Coniothyrium ulmi Tharp, Leaf spot; Payne.

Dothiorella ulmi Verrall & May, Dieback & Wilt.

ULMUS—Continued.

Gloeosporium inconspicuum Cav., Leaf spot; Payne, Seminole.

Gloeosporium ulmeum Miles, Leaf spot; Payne.

Gnomonia ulmea (Schw. ex Fr.) Thum., Black spot; Muskogee, Oklahoma, Payne, Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot.

Lophiostoma asperum Ell. & Ev.; Oklahoma.

Peniophora sp., Woodward.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; Haskell, McClain, Tulsa.

Phyllosticta erratica Ell. & Ev., Leaf spot; Delaware.

Phyllosticta melaleuca Ell. & Ev., Leaf spot; Oklahoma.

Polyporus conchifer (Schw.) Fr., Wood rot; Payne.

U. AMERICANA var. **PENDULA** Ait., **WEEPING ELM**.
Nectria cinnabarina Tode ex Fr., Canker; Payne.

U. CRASSIFOLIA Nutt., **CEDAR ELM**.
Coniothyrium ulmi Tharp, Leaf spot.

U. FULVA Michx., **SLIPPERY ELM**.
Dothiorella ulmi Verrall & May, Dieback & Wilt.
Gloeosporium Miles, Leaf spot; Payne.
Mycosphaerella ulmi Kleb., Leaf spot; Payne.
Phoradendron flavescens (Pursh) Nutt., Mistletoe; McClain.
Phyllosticta sp., Leaf spot; Payne.
Taphrina ulmi (Fckl.) Johans., Leaf blister; Payne.
Uncinula macrospora Pk., Powdery mildew; Lincoln, Payne.

U. PUMILA L., **SIBERIAN ELM**.
Chalaropsis thielavioides Peyronel, Seedling root rot.
Gloeosporium inconspicuum Cav., Twig blight; Payne.
Gloeosporium ulmicolum Miles, Leaf spot; Beckham, Payne.
Heterodera marioni (Cornu) Goodey, Root knot; Haskell.
Nectria cinnabarina Tode ex Fr., Coral spot: Canker; Payne.
Phymatotrichum omnivorum (Shear) Dug., Root rot.
Taphrina ulmi (Fckl.) Johans., Leaf blister; Payne.

U. SPP., ELM.
Armillaria mellea Vahl ex Fr., Mushroom root rot.
Cephalothecium sp.; Adair,
Coryneum sp., Leaf spot; Adair.
Daedalea ambigua Berk., Wood rot.
Gloeosporium inconspicuum Cav., Leaf spot; Canadian, Payne.

ULMUS—Continued.

Gnomonia ulmea (Schw. ex Fr.) Thum., Leaf spot; general with collections from Beckham, Canadian, Creek, Custer, Garvin, Mayes, Muskogee, Nowata, Okfuskee, Oklahoma, Ottawa, Payne, Texas, Tillman, Tulsa.

Heterodera marioni (Cornu) Goodey, Root knot; Payne.

Hydnus sp.; Payne.

Nectria cinnabarinina Tode ex Fr., Canker; Okfuskee, Oklahoma.

Phoradendron flavescens (Pursh) Nutt., Mistletoe; McCurtain.

Phymatotrichum omnivorum (Shear) Dug., Texas root rot; Beckham, Tillman.

Septoria ulmi Ell. & Ev., Leaf spot; Canadian.

Sphaeropsis ulmicola Ell. & Ev., Canker; Cotton, Oklahoma.

UNIOLA

U. LATIFOLIA Michx., BROADLEAF UNIOLA.

Helminthosporium sp., Leaf spot; Payne.

URTICA

U. CHAMAEDRYOIDES Pursh, WEAKSTING NETTLE.

Aecidium libertum Arth., Rust; Creek.

VACCINIUM

V. SP.

Rhytisma vaccinii Schw. ex Fr., Tar spot; Delaware.

VALERIANELLA

V. RADIATA (L.) Dufr., BEAKED CORNSALAD.

Septoria valerianellae Miles, Leaf spot; Payne.

V. SP.

Peronospora sp., Downy mildew; Noble.

VERATRUM

V. WOODII Robbins, WOODS FALSEHELLEBORE.

Puccinia atropuncta Pk. & Clint., Rust; Le Flore.

VERBASCUM

V. BLATTARIA L., MOTH MULLEIN.

Septoria verbascicola Berk. & Curt., Leaf spot; Cherokee.

VERBENA

- V. BRACTEATA Lag. & Rodr., BIGBRACT VERBENA.
Septoria verbenae Rob. & Desm., Leaf spot; Payne.
- V. CANADENSIS (L.) Britton, ROSE VERBENA.
Puccinia vilfae Arth. & Holw., Rust.
Septoria verbenae Rob. & Desm., Leaf spot; Comanche, Delaware, Payne.
- V. HYBRIDA Voss, VERBENA.
Sclerotium bataticola Taub., Charcoal rot; Payne.
- V. PUMILA Rydb., VERBENA.
Septoria verbenae Rob. & Desm., Leaf spot; Caddo.
- V. SIMPLEX Lehm., VERBENA.
Cuscuta arvensis Beyrich, Dodder; Muskogee.
- V. STRICTA Vent., WOOLY VERBENA.
Puccinia vilfae Arth. & Holw., Rust.
- V. URTICIFOLIA L., WHITE VERBENA.
Erysiphe cichoracearum DC., Powdery mildew; Payne.
Puccinia vilfae Arth. & Holw., Rust.
Septoria verbenae Rob. & Desm., Leaf spot; McCurtain.

VERNONIA

- V. BALDWINI Torr., BALDWIN IRONWEED.
Cercospora oculata Ell. & Kell., Leaf spot; Payne.
Coleosporium vernoniae Berk. & Curt., Rust; Okfuskee, Osage, Payne.
Cuscuta cuspidata Engelm., Dodder; Cleveland.
Puccinia vernoniae Schw., Rust.
- V. CRINITA Raf., BUR IRONWEED.
Coleosporium vernoniae Berk. & Curt., Rust.
Puccinia vernoniae Schw., Rust.
- V. FASCICULATA Michx., WESTERN IRONWEED.
Coleosporium vernoniae Berk. & Curt., Rust.
- V. INTERIOR Small, IRONWEED.
Puccinia vernoniae Schw., Rust.
- V. MISSURICA Raf., MISSOURI IRONWEED.
Cercospora vernoniae Ell. & Kell., Leaf spot; Murray.

VERONICA

- V. PEREGRINA L., PURSLANE SPEEDWELL.
Ramularia veronicae Fckl., Leaf spot; Payne.

VIBURNUM

- V. OPULUS L., EUROPEAN CRANBERRYBUSH: HIGH BUSH CRANBERRY.
Cercospora varia Pk., Leaf spot; Payne.
Cercospora viburnicola Ray, Leaf spot; Payne.

VIBURNUM—Continued.

- V. RUFIDULUM Raf., RUSTY BLACKHAW VIBURNUM.
Phyllosticta sp., Leaf spot; Murray.
- V. TOMENTOSUM Thunb., DOUBLEFILE VIBURNUM: JAPANESE SNOWBALL.
Cercospora viburnicola Ray, Leaf spot; Payne.
- V. SP., VIBURNUM.
Heterodera marioni (Cornu) Goodey, Root knot; Tulsa.

VICIA

- V. AMERICANA Muhl., AMERICAN VETCH.
Cuscuta indecora Choisy, Dodder; Comanche.
- V. VILLOSA Roth., HAIRY VETCH.
Ascochyta pisi Lib., Leaf spot; Payne.
Colletotrichum viciae Dearn. & Overh., Leaf spot; Payne.
Gloeosporium americanum Ell. & Ev., Leaf spot; Logan.

VIGNA

- V. CATJANG Walp., CATJANG COWPEA.
Pseudomonas syringae van Hall, Bacterial blight; Payne.
- V. SINENSIS (Torner) Savi, COMMON COWPEA.
Aristostoma oeconomicum (Ell. & Tracy) Tehon, Zonate leaf spot; Hughes, Payne, Seminole.
Cercospora cruenta Sacc., Leaf spot; general with collections from Bryan, Carter, Choctaw, Haskell, Hughes, McClain, Payne, Seminole, Woodward.
Erysiphe polygoni DC., Powdery mildew; Payne, Pottawatomie, Woodward.
Fusarium oxysporum f. *tracheiphilum* (E.F.Sw.) Snyder & Hansen, Wilt; Seminole, Woodward.
Heterodera marioni (Cornu) Goodey, Root knot; general with collections from Oklahoma, Payne.
Macrophomina phaseoli (Maubl.) Ashby, Ashy stem blight; Pawnee, Payne.
Nematospora coryli Peglion, Yeast spot; Payne.
Phoma terrestris Hansen; Payne.
Phyllosticta phaseolina Sacc., Leaf spot; Payne.
Phymatotrichum omnivorum (Shear) Dug., Texas root rot; Carter, Choctaw, Tillman.
Pseudomonas syringae van Hall, Bacterial blight; general with collections from Payne, Seminole.
Sclerotium bataticola Taub., Charcoal rot; Comanche, Payne, Pottawatomie.

VIGNA—Continued.

Sclerotium rolfsii Sacc., Southern blight; Muskogee.
Uromyces phaseoli vignae (Barcl.) Arth., Rust; Carter, Cleveland, McClain, Oklahoma, Payne, Woodward.
Xanthomonas phaseoli (E.F.Sm.) Dowson, Bacterial blight; Payne, Seminole.
Xanthomonas vignicola Burkh., Bacterial crown canker; Comanche, Creek, Hughes, Pawnee, Payne, Pottawatomie, Stephens, Woodward.
Virus, Mosaic; Payne, Seminole.

VINCETOXICUM

V. SP., ANGLEPOD.
Puccinia obliqua Berk. & Curt., Rust; Payne.

VIOLA

V. MISSOURIENSIS GREENE, MISSOURI VIOLET.
Cercospora violae Sacc., Leaf spot; Murray.
Colletotrichum violae-rotundifoliae (Sacc.) House, Anthracnose; Payne.
Puccinia violae (Schum.) DC., Rust; Payne.
V. PAPILIONACEA Pursh, BUTTERFLY VIOLET.
Cercospora granuliformis Ell. & Holw., Leaf spot; Payne.
Cercospora violae Sacc., Leaf spot; Payne.
Colletotrichum violae-tricoloris R.E.Sm., Anthracnose; Payne.
Puccinia violae (Schum.) DC., Rust.
V. SP., VIOLET.
Puccinia violae (Schum.) DC., Rust; Kay.

VITEX

V. AGNUSCASTUS L., LILAC CHASTETREE.
Cercospora viticis Ell. & Ev., Leaf spot; Payne.
Phoma sp., Payne.

VITIS

V. BERLANDIERI Planch., WINTER GRAPE.
Guignardia bidwellii (Ell.) Viala & Ravaz, Black rot.
V. CINEREA Engelm., SWEET WINTER GRAPE.
Phyllosticta viticola (Berk. & Curt.) Thum., Leaf spot; Payne.
V. MUNSONIANA Simpson, BIRD GRAPE.
Guignardia bidwellii (Ell.) Viala & Ravaz, Black rot.
V. RUPESTRIS Scheele, SAND GRAPE.
Phyllosticta viticola (Berk. & Curt.) Thum., Leaf spot; Cherokee, McCurtain.
Plasmopara viticola (Berk. & Curt.) Berl. & De Toni, Downy mildew; Payne.

VITIS—Continued.

V. SPP., GRAPE.

Agrobacterium tumefaciens (E.F.Sm.& Town.) Conn, Crown gall.
Alternaria sp., Leaf & stem blotch; Nowata.
Clitocybe monadelpha (Morgan) Sacc., Root rot.
Elsinoe ampelina (DeBy.) Shear, Anthracnose; general with collections from Cherokee, Craig, Garfield, Grady, Muskogee, Payne, Tulsa.
Eutypella vitis (Schw. ex Fr.) Ell.& Ev.; Payne.
Guignardia bidwellii (Ell.) Viala & Ravaz, Black rot; general with collections from Blaine, Bryan, Cherokee, Cleveland, Coal, Creek, Dewey, Garfield, Garvin, Grady, Johnston, Le Flore, Logan, McCurtain, Oklahoma, Okmulgee, Payne, Seminole, Washington, Woodward.
Heterodera marioni (Cornu) Goodey, Root knot.
Melanconium fuligineum (Scrib.& Viala) Cav., Bitter rot; Payne.
Monilinia fructicola (Wint.) Honey, Brown rot; McClain, Muskogee.
Plasmopara viticola (Berk.& Curt.) Berl.& De Toni, Downy mildew; general with collections from Haskell, Okmulgee, Osage, Payne, Woodward.
Uncinula nectar (Schw.) Burr., Powdery mildew.
Nonparasitic, Measles & Water berry.

WISTARIA

W. SP., WISTARIA.

Septoria wistariae Tharp, Leaf spot; Oklahoma.

XANTHIUM

X. CHINENESE Mill., COCKLEBUR.
Puccinia xanthii Schw., Rust; Delaware, Le Flore.
 X. CHINENSE Mill., COCKLEBUR.
Puccinia xanthii Schw., Rust.
 X. INFLEXUM Mackenzie & Bush, COCKLEBUR.
Puccinia xanthii Schw., Rust.
 X. ITALICUM Mor., ITALIAN COCKLEBUR.
Puccinia xanthii Schw., Rust.
 X. ORIENTALE L., ORIENTAL COCKLEBUR.
Puccinia xanthii Schw., Rust.
 X. SPECIOSUM Kearney, GREAT COCKLEBUR.
Puccinia xanthii Schw., Rust.
 X. SPP., COCKLEBUR.
Puccinia canaliculata (Schw.) Lagerh., Rust.
Puccinia xanthii Schw., Rust; Comanche, Haskell, Kay, Muskogee, Payne.

YUCCA

Y. FILAMENTOSA L., ADAMSNEEDLE YUCCA.
Cercospora concentrica Ck.& Ell., Leaf spot; Payne.
Kellermania yuccigena Ell.& Ev., Leaf spot; Woodward.

Y. GLAUCIA Nutt., SMALL SOAPWEED.
Cylindrosporium angustifolium Ell.& Kell., Leaf spot; Payne.
Didymella sphaerelloides Sacc., Leaf spot; Oklahoma.
Kellermania yuccigena Ell.& Ev., Leaf spot; Payne, Woodward.

ZANTHOXYLUM

Z. AMERICANUM Mill., COMMON PRICKLYASH.
Puccinia andropogonis xanthoxyli (Pk.) Arth., Rust; Payne.

Z. CLAVA-HERCULIS L., HERCULES' CLUB.
Puccinia andropogonis xanthoxyli (Pk.) Arth., Rust; Payne.

ZEA

Z. MAYS L., CORN.

Alternaria spp., Mold; general with collections from Alfalfa, Hughes, Payne, Washington.

Aspergillus niger van Teigh., Ear mold; general with collections from Alfalfa, Creek, Payne, Pottawatomie, Seminole, Tulsa.

Bacterium stewartii E.F.Sm., Bacterial wilt; Stewart's disease; Bryan, Canadian, Hughes, Okfuskee, Seminole.

Diplodia frumenti Ell.& Ev., Stalk rot; Payne.

Diplodia zeae Lev., Dry rot; general with collections from Bryan, Choctaw, Coal, Craig, Creek, Delaware, Dewey, Garvin, Johnston, McClain, Noble, Nowata, Oklahoma, Okmulgee, Osage, Payne, Pittsburg, Seminole, Tulsa.

Fusarium moniliforme Sheld., Ear rot; general with collections from Craig, Delaware, Dewey, Johnston, Nowata, Payne, Pottawatomie, Seminole.

Fusarium spp., Damping off: Rot & Stalk rot; general with collections from Alfalfa, Noble, Oklahoma, Payne, Pottawatomie, Roger Mills, Washington.

Gibberella zeae (Schw.) Petch, Scab; general with collections from Mayes, Payne.

Helminthosporium turcicum Pass., Leaf blight; Hughes, Latimer, Payne, Pittsburg.

Helminthosporium sp., Leaf spot; Alfalfa.

ZEA—Continued.

Heterodera marioni (Cornu). Goodey, Root knot; Okfuskee.

Penicillium spp., Blue mold; general.

Physoderma zae-maydis Shaw, Brown spot; general with collections from Garvin, Hughes, Payne, Stephens.

Phytoponas dissolvens H. R. Rosen, Bacterial stalk rot; Grady, Hughes, Pawnee.

Puccinia sorghi Schw., Rust; general with collections from Garvin, Hughes, Okmulgee, Payne, Seminole.

Pythium debaryanum Hesse; Payne.

Rhizoctonia solani Kuhn, Root rot; general.

Rhizopus nigricans Ehrenb. ex Fr., Seed blight; general.

Sclerospora graminicola (Sacc.) Schroet., Leaf spot; Stephens.

Sclerotium bataticola Taub., Charcoal rot; general with collections from Comanche, Oklahoma, Payne.

Sphacelotheca reiliana (Kuhn) Clint., Head smut; Alfalfa.

Ustilago maydis (DC.) Cda., Corn smut; general with collections from Choctaw, Comanche, Custer, Dewey, Garfield, Garvin, Hughes, Johnston, Latimer, McClain, Payne, Pittsburg, Pottawatomie, Seminole, Tillman, Woodward.

Virus, Mosaic.

ZINNIA

Z. ELEGANS Jacq., COMMON ZINNIA.

Alternaria sp., Leaf spot; Payne.

Cicinnobolus cesatii DeBy., on *Erysiphe cichoracearum* DC.; Payne.

Erysiphe cichoracearum DC., Powdery mildew; general with collections from McCurtain, Payne, Washita.

Sclerotium bataticola Taub., Charcoal rot; Payne, Tulsa.

Virus, Mosaic; Payne.

ZIGADENUS

Z. NUTTALLII Gray, NUTTALL DEATHCAMAS.

Uromyces zygadeni Pk., Rust; Cherokee.

ZIZYPHUS

Z. JUJUBA Mill., COMMON JUJUBE.

Alternaria sp., Leaf spot; Woodward.

Index to Pathogens or Causal Agents

ACTINOMYCES IPOMOEAE

Ipomoea batatas

ACTINOMYCES SCABIES

Solanum tuberosum

ACTINOPELTE DRYINA

Quercus muhlenbergii

AECIDIUM LIBERTUM

Urtica chamaedryoides

AECIDIUM MEXICANUM

Cissus incisa

AECIDIUM PHYSALIDIS

Physalis pumila

Physalis virginiana

AECIDIUM RESIDUUM

Sisyrinchium gramineum

AGROBACTERIUM RHIZO-GENES

Caragana arborescens

Fraxinus americana

Malus sylvestris

AGROBACTERIUM TUMEFACIENS

Acer saccharinum

Acer sp.

Carya illinoensis

Gossypium hirsutum

Jasminum humile

Lespedeza sp.

Malus sylvestris

Medicago sativa

Prunus persica

Prunus spp. (Cherry)

Prunus spp. (Plum)

Ribes spp. (Gooseberry)

Rosa spp.

Rubus spp. (Blackberry)

Rubus sp. (Boysenberry)

Rubus sp. (Dewberry)

Rubus sp. (Raspberry)

Vitis spp.

ALBUGO BLITI

Acnida tamariscina

Amaranthus retroflexus

Amaranthus spinosus

ALBUGO CANDIDA

Arabis laevigata

Armoracia rusticana

Brassica juncea

Brassica rapa

Brassica sp.

Camelina microcarpa

Camelina sativa

Capsella bursa-pastoris

Descurainia pinnata

Raphanus sativus

Sisymbrium altissimum

ALBUGO IPOMOAE-PANDURANAEE

Ipomoea hederacea

Ipomoea pandurata

Ipomoea purpurea

Quamoclit coccinea

ALBUGO OCCIDENTALIS

Spinacia oleracea

ALBUGO PORTULACAE

Portulaca oleracea

ALBUGO TRAGOPOGONIS

Antennaria plantaginifolia

Cirsium undulatum var.

megacephalum

ALTERNARIA CATALPAE

Catalpa speciosa

ALTERNARIA CIRCINANS

Brassica oleracea var.

botrytis

Brassica oleracea var.

capitata

ALTERNARIA CRASSA	<i>Thuja occidentalis</i>
<i>Datura meteloides</i>	<i>Tithonia rotundifolia</i>
<i>Datura stramonium</i>	<i>Triticum spelta</i>
ALTERNARIA FASCICULATA	<i>Vitis spp.</i>
<i>Asclepiodora viridis</i>	<i>Zea mays</i>
<i>Asparagus officinalis</i>	<i>Zinnia elegans</i>
<i>Phaseolus vulgaris</i>	<i>Zizyphus jujuba</i>
<i>Robinia hispida</i>	
ALTERNARIA NELUMBII	ANGUILLULINA AGROSTIS
<i>Nelumbo lutea</i>	<i>Buchloe dactyloides</i>
ALTERNARIA SOLANI	APHANOMYCES RAPHANI
<i>Capsicum frutescens</i>	<i>Raphanus sativus</i> (Garden
<i>Lycopersicon esculentum</i>	& White Icicle Radish)
<i>Solanum tuberosum</i>	
ALTERNARIA SONCHI	ARISTASTOMA OECON-
<i>Sonchus asper</i>	OMICUM
ALTERNARIA TENUIS	<i>Vigna sinensis</i>
<i>Ptelea trifoliata</i>	
ALTERNARIA TOMATO	ARMILLARIA MELLEA
<i>Lycopersicon esculentum</i>	<i>Acer spp.</i>
ALTERNARIA SPP.	<i>Crataegus spp.</i>
<i>Amaranthus retroflexus</i>	<i>Ligustrum vulgare</i>
<i>Cercis canadensis</i>	<i>Malus sylvestris</i>
<i>Chrysanthemum spp.</i>	<i>Morus alba</i>
<i>Cornus asperifolia</i>	<i>Platanus occidentalis</i>
<i>Elaeagnus angustifolia</i>	<i>Prunus persica</i>
<i>Forsythia intermedia</i>	<i>Prunus spp.</i> (Cherry)
<i>Gleditsia triacanthos</i>	<i>Prunus spp.</i> (Plum)
<i>Gomphrena globosa</i>	<i>Rosa spp.</i>
<i>Gomphrena sp.</i>	<i>Rubus spp.</i> (Blackberry)
<i>Gossypium hirsutum</i>	<i>Ulmus spp.</i>
<i>Ilex sp.</i>	
<i>Ipomoea batatas</i>	ASCOCHYTA AGROPYRINA
<i>Juniperus spp.</i>	<i>Agropyron trachycaulum</i>
<i>Jussiaea decurrents</i>	
<i>Lactuca sativa</i>	ASCOCHYTA ELYMI
<i>Medicago sativa</i>	<i>Elymus canadensis</i>
<i>Paeonia spp.</i>	
<i>Rheum rhaboticum</i>	ASCOCHYTA GOSSYPII
<i>Sambucus spp.</i>	<i>Gossypium hirsutum</i>
<i>Sorghum vulgare</i>	
<i>Tetragonia expansa</i>	ASCOCHYTA GRAMINICOLA
	<i>Sphenopholis intermedia</i>
	ASCOCHYTA IMPERFECTA
	<i>Medicago sativa</i>
	ASCOCHYTA PISI
	<i>Crotalaria spectabilis</i>
	<i>Melilotus alba</i>
	<i>Pisum sativum</i>

<i>Pisum sativum</i> var. <i>arvense</i>		<i>Nicotiana tabacum</i>
<i>Vicia villosa</i>		<i>Phaseolus vulgaris</i>
ASCOCHYTA PLANTAGINIS		<i>Solanum melongena</i>
<i>Plantago aristata</i>		<i>Solanum tuberosum</i>
<i>Plantago major</i>		
ASCOCHYTA SILENES		BACTERIUM STEWARTII
<i>Silene antirrhina</i>		<i>Zea mays</i>
ASCOCHYTA SORGHINA		BACTERIUM SP.
<i>Sorghum vulgare</i>		<i>Setaria lutescens</i>
ASCOCHYTA SPP.		BOTRYOSPHAERIA RHIZ-OGENA
<i>Aegilops cylindrica</i>		<i>Gleditsia triacanthos</i>
<i>Bouteloua curtipendula</i>		BOTRYOSPHAERIA RIBIS
<i>Bouteloua gracilis</i>		<i>Cladrastis lutea</i>
<i>Bouteloua rigidiseta</i>		<i>Malus sylvestris</i>
<i>Bromus commutatus</i>		<i>Rosa spp.</i>
<i>Bromus inermis</i>		BOTRYOSPHAERIA RIBIS
<i>Bromus purgans</i>		var. CHROMOGENA
<i>Calamovilfa gigantea</i>		<i>Hibiscus syriacus</i>
<i>Strophostyles pauciflora</i>		BOTRYTIS ALLII
ASPERGILLUS NIGER		<i>Allium cepa</i>
<i>Allium cepa</i>		BOTRYTIS CINEREA
<i>Gossypium hirsutum</i>		<i>Amaryllis spp.</i>
<i>Sorghum vulgare</i>		<i>Pisum sativum</i>
<i>Zea mays</i>		<i>Rosa spp.</i>
ASPERGILLUS SPP.		BOTRYTIS CONVOLUTA
<i>Cucumis melo</i>		<i>Iris versicolor</i>
<i>Gladiolus spp.</i>		BOTRYTIS PAEONIAE
<i>Gossypium hirsutum</i>		<i>Paeonia spp.</i>
<i>Hyacinthus spp.</i>		BOTRYTIS TULIPAE
<i>Ipomoea batatas</i>		<i>Tulipa spp.</i>
<i>Narcissus spp.</i>		BOTRYTIS SPP.
<i>Tulipa spp.</i>		<i>Antirrhinum majus</i>
BACTERIUM CANNAE		<i>Arachis hypogaea</i>
<i>Canna indica</i>		<i>Fragaria spp.</i>
BACTERIUM PUNCTULANS		<i>Hyacinthus spp.</i>
<i>Lycopersicon esculentum</i>		<i>Lilium regale</i>
BACTERIUM SOLANACE-ARUM		<i>Narcissus spp.</i>
<i>Capsicum frutescens</i>		<i>Platycodon grandiflorum</i>
<i>Dahlia spp.</i>		BRACHYSPORIUM SP.
<i>Lycopersicon esculentum</i>		<i>Gossypium hirsutum</i>

BREMIA LACTUCAE	CERCOSPORA ARACHIDI-COLA
<i>Krigia</i> sp.	<i>Arachis hypogaea</i>
<i>Lactuca</i> sp.	
BUBAKIA CROTONIS	CERCOSPORA ARCTI-AMBROSIAE
<i>Croton capitatus</i>	<i>Ambrosia trifida</i>
<i>Croton monanthogynus</i>	
<i>Croton texensis</i>	
CEPHALOBOLUS ELONGATUS	CERCOSPORA ASPARAGI
<i>Medicago sativa</i>	<i>Asparagus officinalis</i>
CEPHALOBOLUS SP.	CERCOSPORA ASTRAGALI
<i>Solanum tuberosum</i>	<i>Astragalus cicer</i>
CEPHALOTHECIUM	CERCOSPORA AVICULARIS
ROSEUM	<i>Polygonum pensylvanicum</i>
<i>Malus sylvestris</i>	
<i>Prunus persica</i>	
CEPHALOTHECIUM SPP.	CERCOSPORA BETICOLA
<i>Sorghum vulgare</i>	<i>Beta vulgaris</i>
<i>Ulmus</i> spp.	<i>Beta vulgaris</i> var. <i>cicla</i>
CERCOSPORA ACALYPHAE	CERCOSPORA BIFORMIS
<i>Acalypha gracilens</i>	<i>Passiflora incarnata</i>
<i>Acalypha ostryaefolia</i>	
CERCOSPORA ADUSTA	CERCOSPORA CALLICARPAE
<i>Ligustrum amurense</i>	<i>Callicarpa americana</i>
<i>Ligustrum ibolium</i>	
<i>Ligustrum ovalifolium</i>	
CERCOSPORA AGROSTIDIS	CERCOSPORA CAPSICI
<i>Agrostis perennans</i>	<i>Capsicum frutescens</i>
CERCOSPORA ALTHAEINA	CERCOSPORA CATALPAE
<i>Althaea rosea</i>	<i>Catalpa bignonioides</i>
CERCOSPORA ANGULATA	CERCOSPORA CATENOSPORA
<i>Philadelphus coronarius</i>	<i>Sambucus</i> spp.
<i>Philadelphus grandiflorus</i>	
<i>Philadelphus lemoinei</i>	
CERCOSPORA ANTHEL-MINTICA	CERCOSPORA CELOSIAE
<i>Chenopodium hybridum</i>	<i>Celosia argentea</i>
CERCOSPORA APII	CERCOSPORA CERCIDIS
<i>Apium graveolens</i> var. <i>dulce</i>	<i>Cercis canadensis</i>
	CERCOSPORA CHIONANTHI
	<i>Chionanthus virginica</i>
	CERCOSPORA CHRYSANTHEMI
	<i>Chrysanthemum maximum</i>
	CERCOSPORA CLAVATA
	<i>Asclepias speciosa</i>
	CERCOSPORA COCCULICOLA
	<i>Cocculus carolinus</i>

CERCOSPORA CONCENTRICA	CERCOSPORA DIOSPYRI
<i>Yucca filamentosa</i>	<i>Diospyros virginiana</i>
CERCOSPORA CONDENSATA	CERCOSPORA DUBIA
<i>Gleditsia triacanthos</i>	<i>Chenopodium album</i>
CERCOSPORA CONSOCIATA	<i>Chenopodium hybridum</i>
<i>Ruellia strepens</i>	CERCOSPORA ELAEAGNI
CERCOSPORA CONSPICUA	<i>Elaeagnus angustifolia</i>
<i>Cleome lutea</i>	<i>Elaeagnus commutata</i>
<i>Cleome serrulata</i>	CERCOSPORA FERRUGINEA
CERCOSPORA COREOPSIS	<i>Lobelia puberula</i>
SIDS	CERCOSPORA FLAGELLARIS
<i>Coreopsis grandiflora</i>	<i>Phytolacca americana</i>
CERCOSPORA CORYLINA	CERCOSPORA FULIGINOSA
<i>Corylus americana</i>	<i>Diospyros kaki</i>
<i>Corylus cornuta</i>	CERCOSPORA FUSCA
CERCOSPORA CRUENTA	<i>Carya illinoensis</i>
<i>Phaseolus lunatus</i>	CERCOSPORA GAURAE
<i>Vigna sinensis</i>	<i>Gaura biennis</i>
CERCOSPORA CUCURBITAE	<i>Gaura sinuata</i>
<i>Cucurbita foetidissima</i>	CERCOSPORA GLANDULOSA
CERCOSPORA DATURICOLA	<i>Ailanthus altissima</i>
<i>Datura stramonium</i>	CERCOSPORA GOMPHRENAE
CERCOSPORA DAVISII	<i>Gomphrena globosa</i>
<i>Melilotus alba</i>	CERCOSPORA GONOLOBI
<i>Melilotus officinalis</i>	<i>Gonolobus laevis</i>
CERCOSPORA DESMODII	CERCOSPORA GOSSYPINA
<i>Desmodium</i> sp.	<i>Gossypium hirsutum</i>
CERCOSPORA DESMODIICOLA	<i>Gossypium sturtii</i>
<i>Desmodium canescens</i>	CERCOSPORA GRANULIFORMIS
CERCOSPORA DEUTZIAE	<i>Viola papilionacea</i>
<i>Deutzia lemoinei</i>	CERCOSPORA GYMNOCLADII
CERCOSPORA DIANTHERAE	<i>Gymnocladus dioica</i>
<i>Dianthera americana</i>	CERCOSPORA HALESIAE
<i>Dianthera ovata</i>	<i>Halesia monticola</i>
CERCOSPORA DIODIAE	
<i>Diodia teres</i>	

CERCOSPORA HALSTEDII	CERPOSPORA MACROMA-
<i>Carya illinoensis</i>	CULANS
CERCOSPORA HAMAMELI-	<i>Syringa vulgaris</i>
DIS	CERCOSPORA MALAYEN-
<i>Hamamelis virginiana</i>	SIS
CERCOSPORA HELIO-	<i>Hibiscus esculentus</i>
TROPII	<i>Hibiscus rosa-sinensis</i>
<i>Heliotropium curassavicum</i>	CERCOSPORA MARRUBII
CERCOSPORA HETERO-	<i>Marrubium vulgare</i>
MELES	CERCOSPORA MENISPERMI
<i>Photinia</i> sp.	<i>Cocculus carolinus</i>
CERCOSPORA HIBISCI	CERCOSPORA MICROSORA
<i>Hibiscus rosa-sinensis</i>	<i>Tilia americana</i>
<i>Hibiscus syriacus</i>	CERCOSPORA MORICOLA
CERCOSPORA HYALINA	<i>Morus alba</i>
<i>Rosa</i> spp.	CERCOSPORA NANDINAE
CERCOSPORA HYDRAN-	<i>Nandina domestica</i>
GEAE	CERCOSPORA NASTURTI
<i>Hydrangea arborescens</i>	<i>Rorippa nasturtium-</i>
<i>Hydrangea macrophylla</i>	<i>aquaticum</i>
CERCOSPORA HYDROPI-	CERCOSPORA OCULATA
PERIS	<i>Vernonia baldwini</i>
<i>Polygonum pensylvanicum</i>	CERCOSPORA OMPHA-
CERCOSPORA JUSSIAEAE	KODES
<i>Jussiaea diffusa</i>	<i>Phlox pilosa</i> subsp.
CERCOSPORA KOLK-	<i>typica</i>
WITZIAE	CERCOSPORA PACHYPLUS
<i>Kolkwitzia amabilis</i>	<i>Helianthus annuus</i>
CERCOSPORA LABURNI	CERCOSPORA PAEONIAE
<i>Laburnum anagyroides</i>	<i>Paeonia</i> spp.
CERCOSPORA LATHYRINA	CERCOSPORA PASPALI
<i>Lathyrus latifolius</i>	<i>Paspalum stramineum</i>
CERCOSPORA LIPPIAE	CERCOSPORA PENTSTE-
<i>Lippia lanceolata</i>	MONIS
CERCOSPORA LUDWIGIAE	<i>Penstemon cobaea</i>
<i>Ludwigia alternifolia</i>	<i>Penstemon pallidus</i>
CERCOSPORA LYCII	CERCOSPORA PERNICIOSA
<i>Lycium pallidum</i>	<i>Cephalanthus occidentalis</i>

CERCOSPORA PERSONATA
Arachis hypogaea

CERCOSPORA PETUNIAE
Petunia hybrida

CERCOSPORA PHYSALIDIS
Physalis mollis

CERCOSPORA PHYSOCARPI
Physocarpus bracteatus
Physocarpus opulifolius
Spiraea japonica

CERCOSPORA PSORALEAE
Psoralea digitata

CERCOSPORA PTELEAE
Ptelea trifoliata

CERCOSPORA PULCHER-
 RIMAE
Euphorbia marginata

CERCOSPORA RHOINA
Rhus aromatica
Rhus glabra
Rhus trilobata

CERCOSPORA ROSICOLA
Rosa spp.

CERCOSPORA SABBATIAE
Sabatia campestris

CERCOSPORA SALVIICOLA
Salvia azurea

CERCOSPORA SEMINALIS
Buchloe dactyloides

CERCOSPORA SEQUOIAE
 var. JUNIPERI
Juniperus spp.

CERCOSPORA SERIATA
Sporobolus clandestinus

CERCOSPORA SETARII-
 COLA
Setaria lutescens

CERCOSPORA SMILACINA
Smilax bona-nox
Smilax pseudo-china

CERCOSPORA SOJINA
Soja max

CERCOSPORA SORGHI
Sorghum halepense

CERCOSPORA SQUALIDULA
Clematis pitcheri
Clematis virginiana

CERCOSPORA STAPHYLEAE
Staphylea trifolia

CERCOSPORA TEUCRII
Teucrium canadense

CERCOSPORA TRAGOPO-
 GONIS
Tragopogon porrifolius

CERCOSPORA TUBER-
 CULELLA
Convolvulus arvensis

CERCOSPORA VARIA
Viburnum opulus

CERCOSPORA VERNONIAE
Vernonia missurica

CERCOSPORA VIBURNI-
 COLA
Viburnum opulus
Viburnum tomentosum

CERCOSPORA VIOLAE
Viola missouriensis
Viola papilionacea

CERCOSPORA VITICIS
Vitex agnuscastus

CERCOSPORA ZEBRINA
Medicago sativa
Trifolium hybridum

CERCOSPORA SPP.	CHAETOMELLA ATRA
<i>Acer</i> spp.	<i>Panicum texanum</i>
<i>Bromus purgans</i>	<i>Sporobolus asper</i>
<i>Cunninghamia lanceolata</i>	<i>Sporobolus vaginiflorus</i>
<i>Dahlia</i> spp.	CHALAROPSIS THIELAVOIDES
<i>Festuca elatior</i>	<i>Ulmus pumila</i>
<i>Lotus americanus</i>	CHOENEPHORA CUCURBITARUM
<i>Monarda clinopodioides</i>	<i>Cucurbita maxima</i>
<i>Phalaris tuberosa</i> var. <i>stenoptera</i>	<i>Cucurbita moschata</i>
<i>Phellodendron amurense</i>	CICINNOBOLUS CESATII
<i>Prunus caroliniana</i>	<i>Aplopappus ciliatus</i>
<i>Rhododendron</i> spp.	<i>Zinnia elegans</i>
<i>Spinacia oleracea</i>	CINTRACTIA AXICOLA
<i>Stenosiphon linifolius</i>	<i>Fimbristylis autumnalis</i>
<i>Fimbristylis vahlii</i>	CLADOSPORIUM CARPOPHILUM
CERCOSPORELLA ALBO- MACULANS	<i>Prunus persica</i>
<i>Brassica rapa</i>	<i>Prunus</i> spp. (Plum)
CERCOSPORELLA CANA	CLADOSPORIUM CUCUMERINUM
<i>Erigeron strigosus</i>	<i>Cucumis sativus</i>
CERCOSPORELLA CARYI- GENA	CLADOSPORIUM CYCLAMINIS
<i>Carya illinoensis</i>	<i>Cyclamen</i> spp.
CERCOSPORELLA CELTIDIS	CLADOSPORIUM EFFUSUM
<i>Celtis occidentalis</i>	<i>Carya illinoensis</i>
CERCOSPORELLA MORI	CLADOSPORIUM FASCI- CULATUM
<i>Morus alba</i>	<i>Magnolia acuminata</i>
CERCOSPORELLA PERSICAE	<i>Typha latifolia</i>
<i>Prunus persica</i>	CLADOSPORIUM FULVUM
CERCOSPORIDIUM	<i>Lycopersicon esculentum</i>
EUPHORBIAE	CLADOSPORIUM HER- BARUM
<i>Euphorbia maculata</i>	<i>Syringa vulgaris</i>
CERCOSPORIDIUM SP.	CLADOSPORIUM PAEONIAE
<i>Astragalus mexicanus</i>	<i>Paeonia</i> spp.
CEREBELLA ANDROPO- GONIS	
<i>Andropogon furcatus</i>	
<i>Andropogon ischaemum</i>	
<i>Andropogon saccharoides</i>	
<i>Andropogon scoparius</i>	
<i>Andropogon ternarius</i>	
<i>Sorghastrum nutans</i>	

CLADOSPORIUM SPP.

Clematis virginiana
Triticum aestivum

CLAVICEPS PURPUREA

Agropyron repens
Agropyron smithii
Agrostis scabra
Andropogon furcatus
Andropogon hallii
Andropogon scoparius
Bouteloua gracilis
Elymus canadensis
Elymus virginicus
Hordeum vulgare
Lolium multiflorum
Lolium perenne
Secale cereale
Triticum aestivum

CLAVICEPS SP.

Sorghastrum nutans

CLITOCYBE ILLUDENS

Robinia pseudoacacia

CLITOCYBE MONADELPHA

Malus sylvestris
Prunus persica
Vitis spp.

CLITOCYBE PARASITICA

Carya alba
Prunus spp. (Cherry)

CLITOCYBE TABESCENS

Quercus macrocarpa
Quercus marilandica
Vitis spp.

CLITOCYBE SP.

Prunus spp. (Plum)

COCCOMYCES HIEMALIS

Prunus armeniaca
Prunus cerasus
Prunus spp. (Cherry)
Prunus spp. (Plum)

COCCOMYCES PRUNO-

PHORAE
Prunus spp. (Plum)

COLEOSPORIUM ELEPHAN-

TOPODIS
Elephantopus carolinianus

COLEOSPORIUM HELIANTHI

Helianthus rigidus

COLEOSPORIUM IPOMOAE

Ipomoea hederacea
Ipomoea pandurata
Ipomoea purpurea
Ipomoea sp.
Pinus echinata

COLEOSPORIUM SOLIDA-

GINIS
Solidago gigantea var.
leiophylla
Solidago spp.

COLEOSPORIUM VERO-

MINAE
Vernonia baldwini
Vernonia crinita
Vernonia fasciculata

COLLETOTRICHUM

ATRAMENTARIUM
Solanum melongena
Solanum tuberosum

COLLETOTRICHUM

ERUMPENS
Rumex crispus

COLLETOTRICHUM GLY-

CINES
Soja max

COLLETOTRICHUM GRA-

MINICOLUM
Agropyron elongatum
Agropyron intermedium
Agropyron smithii
Andropogon scoparius

<i>Aristida dichotoma</i>	COLLETOTRICHUM
<i>Avena sativa</i>	LILIACEARUM
<i>Bromus carinatus</i>	<i>Amaryllis</i> spp.
<i>Chloris verticillata</i>	<i>Hemerocallis</i> sp.
<i>Cynodon dactylon</i>	<i>Iris</i> spp.
<i>Dactylis glomerata</i>	<i>Kniphofia elegans</i>
<i>Diarrhena americana</i>	<i>Lilium monadelphum</i>
<i>Digitaria filiformis</i>	COLLETOTRICHUM
<i>Echinochloa crusgalli</i>	LINDEMUTHIANUM
<i>Eleusine indica</i>	<i>Phaseolus vulgaris</i>
<i>Elymus junceus</i>	COLLETOTRICHUM
<i>Elymus virginicus</i>	OMNIVORUM
<i>Eragrostis trichodes</i>	<i>Aspidistra elatior</i>
<i>Festuca elatior</i>	COLLETOTRICHUM
<i>Festuca versuta</i>	PHOMOIDES
<i>Hordeum bulbosum</i>	<i>Lycopersicon esculentum</i>
<i>Hordeum vulgare</i>	COLLETOTRICHUM
<i>Melica nitens</i>	SMILACIS
<i>Muhlenbergia capillaris</i>	<i>Smilax</i> sp.
<i>Muhlenbergia mexicana</i>	COLLETOTRICHUM
<i>Muhlenbergia racemosa</i>	TRICHELLUM
<i>Panicum boscii</i> var. <i>molle</i>	<i>Hedera helix</i>
<i>Phalaris tuberosa</i> var.	COLLETOTRICHUM
<i>stenoptera</i>	TRIFOLII
<i>Phleum pratense</i>	<i>Medicago hispida</i>
<i>Poa ampla</i>	<i>Medicago sativa</i>
<i>Poa canbyi</i>	<i>Melilotus alba</i>
<i>Secale cereale</i>	<i>Trifolium</i> spp.
<i>Sorghum halepense</i>	COLLETOTRICHUM
<i>Sorghum vulgare</i>	TRUNCATUM
<i>Sorghum vulgare</i> var.	<i>Phaeoseolus lunatus</i>
<i>technicum</i>	COLLETOTRICHUM
<i>Sporobolus asper</i>	VICIAE
<i>Sporobolus heterolepis</i>	<i>Vicia villosa</i>
<i>Triodia albescens</i>	COLLETOTRICHUM
<i>Triodia elongata</i>	VIOLAE-ROTUNDIFOLIAE
<i>Tripsacum dactyloides</i>	<i>Viola missouriensis</i>
<i>Triticum aestivum</i>	COLLETOTRICHUM
COLLETOTRICHUM	VIOLAE-TRICOLORIS
HIGGINSIANUM	<i>Viola papilionacea</i>
<i>Brassica rapa</i>	
COLLETOTRICHUM	
LAGENARIUM	
<i>Citrullus vulgaris</i>	
<i>Cucumis melo</i>	
<i>Cucumis sativus</i>	

COLLETOTRICHUM SPP.
Carex gravida
Nothoscordum bivalve
Phytolacca americana

CONIOSPORIUM
RHIZOPHILUM
Cynodon dactylon

CONIOTHYRIUM
FUCKELII
Rosa spp.
Rubus sp. (Raspberry)

CONIOTHYRIUM ULMI
Ulmus americana
Ulmus crassifolia

CONIOTHYRIUM SPP.
Cicuta maculata
Dodecatheon meadia
Jasminum floridum
Jasminum humile
Jasminum nudiflorum
Ligustrum vulgare
Mahonia aquifolium
Rubus sp. (Boysenberry)
Rubus sp. (Youngberry)

CORTICIUM SP.
Sophora affinis

CORYNEBACTERIUM
FASCIANS
Lathyrus odoratus

CORYNEBACTERIUM
INSIDIOSUM
Medicago sativa

CORYNEBACTERIUM
MICHIGANENSE
Lycopersicon esculentum

CORYNEBACTERIUM
SEPEDONICUM
Solanum tuberosum

CORYNEUM BEIJERINCKII
Prunus persica

CORYNEUM KUNZEI
Quercus spp.

CORYNEUM MICROSTICTUM
Rosa spp.

CORYNEUM THUJINUM
Thuja occidentalis

CORYNEUM SPP.
Salix spp.
Ulmus spp.

CRONARTIUM QUERCUUM
Quercus spp.

**CRYPTOSPORELLA UM-
BRINA**
Rosa spp.

**CURVULARIA GENICU-
LATA**
Eremochloa ophiurooides

CURVULARIA SPICIFERA
Triticum aestivum

CUSCUTA ARVENSIS
Ambrosia psilostachya
Aplopappus ciliatus
Artemisia mexicana
Bacopa sp.
Comandra umbellata
Coreopsis verticillata
Gutierrezia dracunculoides
Lepidium virginicum
Lespedeza spp.
Oenothera spp.
Psoralea digitata
Rudbeckia amplexicaulis
Solidago graminifolia
Verbena simplex

CUSCUTA COMPACTA
Alnus rugosa
Alnus sp.
Solidago spp.

CUSCUTA CORYLI
Ambrosia psilostachya
Tragia nepetaefolia

CUSCUTA CUSPIDATA

Ambrosia psilostachya
Ambrosia trifida
Alopappus ciliatus
Alopappus divaricatus
Coreopsis tinctoria
Coreopsis verticillata
Erigeron canadensis
Galium aparine
Heliotropium sp.
Solidago spp.
Tribulus terrestris
Vernonia baldwini

CUSCUTA GLOMERATA

Liatris punctata

CUSCUTA GRONOVII

Ampelopsis arborea

CUSCUTA INDECORA

Actinea linearifolia
Ambrosia psilostachya
Aster ericoides
Coreopsis verticillata
Iva ciliata
Medicago sativa
Vicia americana

CUSCUTA OBTUSIFLORA

Ambrosia sp.

CUSCUTA SPP.

Ambrosia trifida
Gutierrezia sarothrae
Helianthus spp.
Lagerstroemia indica
Medicago sativa
Petunia hybrida
Stillingia sylvatica

CYANOSPORA ALBICEDRAE

Juniperus spp.

CYLINDROSPORIUM

ANGUSTIFOLIUM
Yucca glauca

CYLINDROSPORIUM

APOCYNI
Apocynum androsaemifolium
Apocynum cannabinum

CYLINDROSPORIUM

DEFOLIATUM
Celtis occidentalis
Celtis reticulata

CYLINDROSPORIUM

FRAXINI
Fraxinus velutina
Fraxinus velutina var.
toumeyi

CYLINDROSPORIUM

GRISEUM
Sapindus drummondii

CYLINDROSPORIUM

GUTTATUM
Hypoxis hirsuta

CYLINDROSPORIUM

JUGLANDIS
Juglans nigra
Juglans regia

CYLINDROSPORIUM MORI

Morus rubra

CYLINDROSPORIUM

PASSALOROIDES
Amorpha fruticosa

CYLINDROSPORIUM RUBI

Rubus occidentalis
Rubus sp. (Raspberry)

CYLINDROSPORIUM

SALICINUM
Salix spp.

CYLINDROSPORIUM

SCROPHULARIAE
Scrophularia marilandica

CYLINDROSPORIUM	DAEDEALEA UNICOLOR
TRIOSETI	<i>Quercus</i> spp.
<i>Triosetum perfoliatum</i>	
CYLINDROSPORIUM	DALDINIA CONCENTRICA
ULMICOLA	<i>Quercus</i> spp.
<i>Morus alba</i>	
<i>Morus rubra</i>	
CYLINDROSPORIUM SP.	DARLUCA FILUM
<i>Cornus stolonifera</i>	<i>Lespedeza violacea</i>
<i>Perovskia atriplicifolia</i>	<i>Panicum virgatum</i>
CYTOSPORA ANNULARIS	<i>Populus deltoides</i>
<i>Fraxinus nigra</i>	<i>Secale cereale</i>
CYTOSPORA CHRYSOS- PERMA	DEMATIUM PULLULANS
<i>Acer</i> spp.	<i>Hibiscus syriacus</i>
<i>Populus deltoides</i>	DENDROPHOMA OBSCUR- ANS
<i>Populus</i> spp.	<i>Fragaria</i> spp.
<i>Quercus palustris</i>	DIAPORTHE BATATATIS
<i>Salix</i> spp.	<i>Ipomoea batatas</i>
CYTOSPORA ELAEAGNI	DIAPORTHE PHASEO- LORUM var. SOJAE
<i>Elaeagnus angustifolia</i>	<i>Soja max</i>
CYTOSPORA LEUCOSTOMA	DIBOTRYON MORBOSUM
<i>Malus sylvestris</i>	<i>Prunus</i> spp. (Cherry)
<i>Prunus persica</i>	<i>Prunus</i> spp. (Plum)
CYTOSPORA PLATANI	DIDYMELLA EUMORPHA
<i>Platanus occidentalis</i>	<i>Arundinaria gigantea</i>
CYTOSPORA SPP.	DIDYMELLA SPHAEREL- LOIDES
<i>Juniperus virginiana</i>	<i>Yucca glauca</i>
<i>Poinciana gilliesi</i>	DIDYMELLA SP.
<i>Thuja occidentalis</i>	<i>Callicarpa dichotoma</i>
CYTOSPORELLA SPP.	DIDYMELLINA IRIDIS
<i>Ligustrum vulgare</i>	<i>Iris</i> spp.
CYTOSPORINA SPP.	DIPLOCARPON EARLIANA
<i>Hibiscus syriacus</i>	<i>Fragaria</i> spp.
<i>Koelreuteria paniculata</i>	DIPLOCARPON ROSAE
<i>Poinciana gilliesi</i>	<i>Rosa</i> spp.
DAEDEALEA AMBIGUA	DIPLODIA CARYOGENA
<i>Ulmus</i> spp.	<i>Carya cordiformis</i>
DAEDEALEA JUNIPERINA	<i>Zea mays</i>
<i>Juniperus virginiana</i>	

DIPLODIA FRUMENTI	ELLISIELLA CAUDATA
<i>Arachis hypogaea</i>	<i>Agropyron trachycaulum</i>
DIPLODIA NATALENSIS	<i>Andropogon furcatus</i>
<i>Citrus trifoliata</i>	<i>Andropogon hallii</i>
DIPLODIA TUBERICOLA	<i>Andropogon scoparius</i>
<i>Ipomoea batatas</i>	<i>Andropogon ternarius</i>
DIPLODIA ZEAE	<i>Aristida curtissii</i>
<i>Zea mays</i>	<i>Eragrostis secundiflora</i>
DIPLODIA SPP.	<i>Eragrostis spectabilis</i>
<i>Citrullus vulgaris</i>	<i>Koeleria cristata</i>
<i>Gossypium hirsutum</i>	<i>Manisuris cylindrica</i>
<i>Stapelia</i> sp.	<i>Setaria lutescens</i>
	<i>Sorghastrum nutans</i>
DISAETA SP.	ELSINOE AMPELINA
<i>Ipomoea batatas</i>	<i>Vitis</i> spp.
DISCOSIA ARTOCREAS	ELSINOE RANDII
<i>Cercis canadensis</i>	<i>Carya illinoensis</i>
<i>Paeonia</i> spp.	ELSINOE VENETA
DOTHICHIZA POPULEA	<i>Rubus</i> spp. (Blackberry)
<i>Populus nigra</i> var.	<i>Rubus</i> sp. (Boysenberry)
<i>italica</i>	<i>Rubus</i> sp. (Dewberry)
<i>Populus</i> spp.	<i>Rubus</i> sp. (Raspberry)
DOTHICHLOE ATRAMENTOSA	EMPUSA APHIDIS on
<i>Triodia flava</i>	ILLINOIA
DOTHIORELLA RIBIS	<i>Medicago sativa</i>
<i>Salix discolor</i>	ENDOCONIDIOPHORA
DOTHIORELLA SMILACINA	FIMBRIATA
<i>Smilax bona-nox</i>	<i>Ipomoea batatas</i>
<i>Smilax glauca</i>	ENDODOTHELLA TRACYI
<i>Smilax rotundifolia</i>	<i>Distichilis spicata</i>
DOTHIORELLA ULMI	ENDOPHYLLUM TUBER-CULATUM
<i>Ulmus americana</i>	<i>Althaea rosea</i>
<i>Ulmus fulva</i>	<i>Callirhoe involucrata</i>
DOTHIORELLA SP.	ENTOMOSPORIUM
<i>Kolwitzia amabilis</i>	MACULATUM
DOTHISTROMA PINI	<i>Cydonia oblonga</i>
<i>Pinus echinata</i>	<i>Pyrus communis</i>
	ENTYLOMA AUSTRALE
	<i>Physalis angulata</i>
	<i>Physalis mollis</i>
	<i>Physalis</i> sp.

ENTYLOMA NYMPHAEAE

Nymphaea odorata

ERWINIA AMYLOVORA

*Cydonia oblonga**Malus sylvestris**Prunus* spp. (Plum)*Pyracantha* spp.*Pyrus communis*

ERWINIA CACTIDA

Opuntia rafinesquii

ERWINIA CAROTOVORA

*Allium cepa**Armoracia rusticana**Asparagus officinalis**Brassica juncea**Brassica oleracea* var.
*capitata**Brassica rapa**Chrysanthemum* spp.*Cucumis melo**Daucus carota**Ipomoea batatas**Iris* spp.*Rheum rhabonticum**Solanum tuberosum*

ERWINIA TRACHEIPHILA

*Citrullus vulgaris**Cucumis melo**Cucumis sativus*

ERYSIPHE CICHORACE-

ARUM

*Ambrosia trifida**Alopappus ciliatus**Aster ericoides**Aster salicifolius**Cucumis sativus**Cucurbita foetidissima**Cucurbita maxima**Cucurbita pepo**Gerbera jamesoni**Hedera helix**Helianthus annuus**Lamium amplexicaule**Liatris scariosa**Plantago major**Rudbeckia amplexicaulis**Sonchus asper**Tragopogon porrifolius**Verbena urticifolia**Zinnia elegans*

ERYSIPHE GRAMINIS

Andropogon sp.*Bromus catharticus**Buchloe dactyloides**Hordeum pusillum**Hordeum vulgare**Poa compressa**Polypogon monspeliensis**Secale cereale**Triticum aestivum*

ERYSIPHE LAGERSTROE-

*MIAE**Lagerstroemia indica*

ERYSIPHE POLYGONI

*Brassica rapa**Delphinium* spp.*Lathyrus odoratus**Pisum sativum**Pisum sativum* var.*arvense**Polygonum aviculare**Strophostyles pauciflora**Trifolium* spp.*Vigna sinensis*

EUTYPELLA VITIS

Vitis spp.

EXOBASIDIUM VACCINII

Rhododendron nudiflorum

FABRAEA MACULATA

*Cydonia oblonga**Pyrus communis*

FOMES EVERHARTII

Querus spp.

FOMES FRAXINOPHILUS

Fraxinus americana

FOMES IGNIARIUS	FUSARIUM OXYSPORUM
<i>Quercus</i> spp.	<i>Ipomoea batatas</i>
FOMES OHIENSIS	<i>Solanum tuberosum</i>
<i>Quercus</i> spp.	
FOMES RIMOSUS	FUSARIUM OXYSPORUM f.
<i>Robinia pseudoacacia</i>	CONGLUTINANS
FOMES SPP.	<i>Brassica oleracea</i> var.
<i>Acer</i> spp.	<i>capitata</i>
<i>Fraxinus</i> spp.	<i>Chrysanthemum</i> spp.
<i>Pinus</i> spp.	
FUMAGO VAGANS	FUSARIUM OXYSPORUM f.
<i>Quercus</i> spp.	GLADIOLI
FUSARIUM BATATATIS	<i>Gladiolus</i> spp.
<i>Ipomoea batatas</i>	
FUSARIUM CHLAMYDOS-	FUSARIUM OXYSPORUM f.
PORUM	LYCOPERSICI
<i>Gossypium hirsutum</i>	<i>Lycopersicon esculentum</i>
FUSARIUM EQUISETI var.	FUSARIUM OXYSPORUM f.
BULLATUM	NIVEUM
<i>Gossypium hirsutum</i>	<i>Citrullus vulgaris</i>
FUSARIUM HYPEROXYS-	<i>Cucumis melo</i>
PORUM	
<i>Ipomoea batatas</i>	FUSARIUM OXYSPORUM f.
FUSARIUM LATERITIUM	TRACHEIPHILUM
<i>Hibiscus syriacus</i>	<i>Soja max</i>
FUSARIUM LINI	<i>Vigna sinensis</i>
<i>Linum usitatissimum</i>	
FUSARIUM MALLI	FUSARIUM OXYSPORUM f.
<i>Allium cepa</i>	VASINFECTUM
FUSARIUM MÄRTII var.	<i>Gossypium hirsutum</i>
PHASEOLI	
<i>Phaseolus vulgaris</i>	FUSARIUM RADICICOLA
FUSARIUM MONILIFORME	<i>Ipomoea batatas</i>
<i>Gossypium hirsutum</i>	
<i>Sorghum vulgare</i> var.	FUSARIUM SCIRPI
<i>technicum</i>	<i>Gossypium hirsutum</i>
<i>Zea mays</i>	
	FUSARIUM SCIRPI var.
	ACUMINATUNA
	<i>Gossypium hirsutum</i>
	FUSARIUM SEMITECTUM
	<i>Gossypium hirsutum</i>
	FUSARIUM SOLANI
	<i>Gossypium hirsutum</i>
	FUSARIUM SOLANI f.
	EUMARTII
	<i>Solanum tuberosum</i>

FUSARIUM SOLANI var.	<i>Secale cereale</i>
MARTII	<i>Triticum aestivum</i>
<i>Gossypium hirsutum</i>	<i>Zea mays</i>
FUSARIUM SPP.	GLOEODES POMIGENA
<i>Agrostis palustris</i>	<i>Malus sylvestris</i>
<i>Antirrhinum majus</i>	<i>Pyrus communis</i>
<i>Arachis hypogaea</i>	GLOEOSPORIUM AMERI-
<i>Capsicum frutescens</i>	CANUM
<i>Celosia</i> sp.	<i>Vicia villosa</i>
<i>Chrysanthemum</i> spp.	GLOEOSPORIUM APOCRY-
<i>Citrullus vulgaris</i>	PTUM
<i>Crotalaria</i> spp.	<i>Acer</i> spp.
<i>Cucumis melo</i>	GLOEOSPORIUM BETUL-
<i>Cucumis sativus</i>	ARUM
<i>Dahlia</i> spp.	<i>Betula nigra</i>
<i>Delphinium</i> spp.	<i>Betula papyrifera</i>
<i>Dianthus caryophyllus</i>	GLOEOSPORIUM CINGU-
<i>Euonymus</i> spp.	LATUM
<i>Ligustrum vulgare</i>	<i>Ficus elastica</i>
<i>Lycopersicon esculentum</i>	<i>Smilax</i> spp.
<i>Medicago sativa</i>	GLOEOSPORIUM INCON-
<i>Melilotus alba</i>	SPICUUM
<i>Phaseolus vulgaris</i>	<i>Ulmus alata</i>
<i>Rheum rhaboticum</i>	<i>Ulmus americana</i>
<i>Rosa</i> spp.	<i>Ulmus pumila</i>
<i>Sorghum vulgare</i>	<i>Ulmus</i> spp.
<i>Sorghum vulgare</i> var.	GLOEOSPORIUM LA-
<i>sudanense</i>	PORTEAE
<i>Triticum aestivum</i>	<i>Laportea canadensis</i>
<i>Tulipa</i> spp.	GLOEOSPORIUM MEDIC-
<i>Zea mays</i>	AGINIS
FUSICLADIUM DENDRI-	<i>Medicago sativa</i>
TICUM	GLOEOSPORIUM
<i>Malus sylvestris</i>	MINUTUM
FUSICLADIUM PIRINUM	<i>Anthurium andraeanum</i>
<i>Chaenomeles lagenaria</i>	<i>Anthurium andraeanum</i>
FUSICOCCUM SP.	var. <i>giganteum</i>
<i>Pyracantha</i> spp.	<i>Dieffenbachia picta</i>
GANODERMA SP.	
<i>Colutea arborescens</i>	
GIBBERELLA ZEAE	
<i>Avena sativa</i>	
<i>Hordeum vulgare</i>	

GLOEOSPORIUM POLY-MORPHUM	GNOMONIA VENETA
<i>Dracaena fragans</i>	<i>Platanus occidentalis</i>
GLOEOSPORIUM ROSAE	Quercus spp.
<i>Rosa spp.</i>	
GLOEOSPORIUM ULMEUM	GUIGNARDIA AESCULI
<i>Ulmus americana</i>	<i>Aesculus glabra</i>
GLOEOSPORIUM ULMI-COLUM	<i>Aesculus hippocastanum</i>
<i>Ulmus fulva</i>	<i>Aesculus octandra</i>
GLOEOSPORIUM ULMI-COLUM	GUIGNARDIA BIDWELLII
<i>Ulmus pumila</i>	<i>Parthenocissus tricuspidata</i>
GLOEOSPORIUM SPP.	<i>Vitis berlandieri</i>
<i>Achillea millefolium</i>	<i>Vitis munsoniana</i>
<i>Artistida purpurea</i>	<i>Vitis spp.</i>
<i>Juglans nigra</i>	
<i>Juniperus spp.</i>	GUIDNARDIA BOLTONIAE
<i>Quercus nigra</i>	<i>Boltonia diffusa</i>
<i>Rubus sp. (Boysenberry)</i>	
<i>Rubus sp. (Youngberry)</i>	GYMNOCONIA PECKIANA
<i>Sabatia campestris</i>	<i>Rubus spp. (Blackberry)</i>
GLOMERELLA CINGULATA	<i>Rubus sp. (Raspberry)</i>
<i>Capsicum frutescens</i>	GYMNOSPORANGIUM
<i>Carya illinoensis</i>	BETHELI
<i>Citrus paradisi</i>	<i>Juniperus scopulorum</i>
<i>Ligustrum vulgare</i>	
<i>Nandina domestica</i>	GYMNOSPORANGIUM
GLOMERELLA GLYCINES	CLAVIPES
<i>Soja max</i>	<i>Cydonia oblonga</i>
GLOMERELLA GOSSYPII	<i>Juniperus virginiana</i>
<i>Gossypium hirsutum</i>	
GLOMERELLA SP.	GYMNOSPORANGIUM
<i>Elymus canadensis</i>	EFFUSUM
GNOMONIA CARYA	<i>Juniperus spp.</i>
<i>Carya glabra</i>	
GNOMONIA LEPTOSTYLA	GYMNOSPORANGIUM
<i>Juglans nigra</i>	EXIGUUM
GNOMONIA ULMEA	<i>Juniperus mexicana</i>
<i>Ulmus americana</i>	<i>Juniperus scopulorum</i>
<i>Ulmus spp.</i>	
	GYMNOSPORANGIUM
	GLOBOSUM
	<i>Crataegus viridis</i>
	<i>Crataegus spp.</i>
	<i>Juniperus virginiana</i>
	<i>Malus baccata</i>

GYMNO SPO ANGIUM	HELMINTHOSPORIUM
JUNIPERI-VIRGINIANAE	SATIVUM
<i>Juniperus chinensis</i> var.	<i>Avena sativa</i>
<i>pfitzeriana</i>	<i>Hordeum vulgare</i>
<i>Juniperus virginiana</i>	<i>Triticum aestivum</i>
<i>Juniperus virginiana</i> var.	HELMINTHOSPORIUM
<i>canaertii</i>	TERES
<i>Juniperus virginiana</i> var.	<i>Hordeum vulgare</i>
<i>glauca</i>	HELMINTHOSPORIUM
<i>Juniperus virginiana</i> var.	TURCICUM
<i>pyramidalis</i>	<i>Buchloe dactyloides</i>
<i>Malus ioensis</i>	<i>Setaria italica</i>
<i>Malus sylvestris</i>	<i>Sorghum halepense</i>
GYMNO SPO ANGIUM	<i>Zea mays</i>
NIDUS-AVIS	HELMINTHOSPORIUM SPP.
<i>Juniperus virginiana</i>	<i>Andropogon saccharoides</i>
GYMNO SPO ANGIUM SPP.	<i>Cynodon dactylon</i>
<i>Crataegus</i> spp.	<i>Gossypium hirsutum</i>
<i>Juniperus monosperma</i>	<i>Sorghum vulgare</i>
<i>Juniperus virginiana</i>	<i>Sorghum vulgare</i> var.
<i>Juniperus</i> spp.	<i>sudanense</i>
HELI C OBASIDIUM PUR-	<i>Triticum aestivum</i>
PUREUM	<i>Uniola latifolia</i>
<i>Medicago sativa</i>	<i>Zea mays</i>
<i>Solanum tuberosum</i>	HENDERSONIA EFFUSA
HELMINTHOSPORIUM	<i>Aristida purpurascens</i>
AVENAE	HENDERSONIA MACULANS
<i>Avena sativa</i>	<i>Camellia japonica</i>
HELMINTHOSPORIUM	HETERODERA MARIONI
CYNODONTIS	<i>Althaea rosea</i>
<i>Cynodon dactylon</i>	<i>Anchusa myosotidiflora</i>
HELMINTHOSPORIUM	<i>Anthirrhinum majus</i>
GIGANTEUM	<i>Aquilegia</i> sp.
<i>Cynodon dactylon</i>	<i>Armoracia rusticana</i>
HELMINTHOSPORIUM	<i>Beta vulgaris</i>
GRAMINEUM	<i>Brassica oleracea</i> var.
<i>Hordeum vulgare</i>	<i>capitata</i>
HELMINTHOSPORIUM	<i>Brassica rapa</i>
LEERSII	<i>Carya illinoensis</i>
<i>Bromus inermis</i>	<i>Catalpa speciosa</i>
	<i>Chrysanthemum</i> spp.
	<i>Citrullus vulgaris</i>

<i>Coleus</i> sp.	<i>Vigna sinensis</i>
<i>Cucumis melo</i>	<i>Vitis</i> spp.
<i>Cucumis sativus</i>	<i>Zea mays</i>
<i>Cucurbita maxima</i>	HETEROSPORIUM
<i>Cycas</i> sp.	IRIDIS
<i>Cyclamen</i> spp.	<i>Belamcanda chinensis</i>
<i>Cyclamen</i> spp.	<i>Iris versicolor</i>
<i>Dahlia</i> spp.	HETEROSPORIUM
<i>Daucus carota</i>	SAMBUCI
<i>Dianthus caryophyllus</i>	<i>Sambucus canadensis</i>
<i>Ficus aurea</i>	HETEROSPORIUM
<i>Fragaria</i> spp.	VARIABILE
<i>Fraxinus pennsylvanica</i>	<i>Spinacia oleracea</i>
<i>Fraxinus pennslyvanica</i> var. <i>lanceolata</i>	HETEROSPORIUM SPP.
<i>Fraxinus</i> spp.	<i>Cheiranthus cheiri</i>
<i>Gardenia</i> sp.	<i>Lathyrus odoratus</i>
<i>Gaylussacia</i> spp.	<i>Triticum aestivum</i>
<i>Gossypium hirsutum</i>	HYDNUM SP.
<i>Hibiscus esculentus</i>	<i>Ulmus</i> spp.
<i>Hydrangea</i> sp.	HYPOXYLON ATROPUNC-
<i>Ipomoea batatas</i>	TATUM
<i>Ipomoea purpurea</i>	<i>Quercus marilandica</i>
<i>Iris</i> spp.	HYPOXYLON SP.
<i>Lactuca sativa</i>	<i>Platanus occidentalis</i>
<i>Lathyrus odoratus</i>	KELLERMANIA YUCCIGENA
<i>Lycopersicon esculentum</i>	<i>Yucca filamentosa</i>
<i>Medicago sativa</i>	<i>Yucca glauca</i>
<i>Morus alba</i>	KUEHNEOLA UREDINIS
<i>Pastinaca sativa</i>	<i>Rubus</i> spp. (Blackberry)
<i>Phaseolus aureus</i>	KUNKELIA NITENS
<i>Phaseolus vulgaris</i>	<i>Rubus hispida</i>
<i>Prunus persica</i>	<i>Rubus</i> spp. (Blackberry)
<i>Prunus persica</i> var. <i>nectarina</i>	<i>Rubus</i> sp. (Boysenberry)
<i>Rheum rhabonticum</i>	LASIOSPHAERIA SP.
<i>Robinia pseudoacacia</i>	<i>Artemisia ludoviciana</i>
<i>Rosa</i> spp.	LENZITES SAEPIARIA
<i>Solanum tuberosum</i>	<i>Pinus</i> spp.
<i>Spinacia oleracea</i>	LENZITES SP.
<i>Tragopogon porifolius</i>	<i>Quercus macrocarpa</i>
<i>Ulmus americana</i>	
<i>Ulmus pumila</i>	
<i>Ulmus</i> spp.	
<i>Viburnum</i> sp.	

LEPTOSPHAERIA CON-	MACROSPORIUM CHEI-
IOTHYRIUM	RANTHI
<i>Rubus idaeus</i>	<i>Spinacia oleracea</i>
<i>Rubus</i> spp. (Blackberry)	
LEPTOSPHAERIA	MACROSPORIUM COM-
MUHLENBERGIAE	MUNE
<i>Muhlenbergia sobolifera</i>	<i>Cicuta maculata</i>
LEPTOSPHAERIA VAGA-	MACROSPORIUM CU-
BUNDA	CUMERINUM
<i>Hydrangea arborescens</i>	<i>Citrullus vulgaris</i>
LEPTOTHYRIUM ACER-	<i>Cucumis melo</i>
INUM	<i>Cucumis sativus</i>
<i>Acer saccharum</i>	
LEPTOTHYRIUM NER-	MARSSONINA JUGLANDIS
VISEDUM	<i>Juglans nigra</i>
<i>Carya illinoensis</i>	<i>Juglans regia</i>
LEPTOTHYRIUM POMI	MARSSONINA MARTINI
<i>Diospyros kaki</i>	<i>Quercus muhlenbergii</i>
<i>Malus sylvestris</i>	<i>Quercus stellata</i>
<i>Rubus idaeus</i>	
LOPHIOTOMA ASPERUM	MARSSONINA OCHROLEUCA
<i>Ulmus americana</i>	<i>Castanea pumila</i>
	<i>Castanea</i> sp.
MACROPHOMA BOLTONIAE	MARSSONINA POPULI
<i>Boltonia diffusa</i>	<i>Populus alba</i>
	<i>Salix</i> spp.
MACROPHOMA NEGUN-	MELAMPSORA ABIETI-
DINIS	CAPRAEARUM
<i>Acer negundo</i>	<i>Salix interior</i>
	<i>Salix longipes</i>
MACROPHOMA NERVICOLA	<i>Salix nigra</i>
<i>Quercus alba</i>	MELAMPSORA ABIETIS-
	CANADENSIS
MACROPHOMA SPP.	<i>Populus sargentii</i>
<i>Cotinus coggygria</i>	
<i>Salix discolor</i>	MELAMPSORA ALBERTENSIS
<i>Sophora affinis</i>	<i>Populus angustifolia</i>
MACROPHOMINA PHASEOLI	<i>Populus</i> spp.
<i>Soja max</i>	
<i>Vigna sinensis</i>	MELAMPSORA BIGELOWII
	<i>Salix</i> spp.
MACROSPORIUM CAMEL-	MELAMPSORA LINI
LIAE	<i>Linum usitatissimum</i>
<i>Camellia japonica</i>	

MELAMPSORA MEDUSAE	MONILOCHAETES INFUS-
<i>Populus deltoides</i>	CANS
<i>Populus</i> spp.	<i>Ipomoea batatas</i>
MELAMPSORELLA	MONOCHAETIA DESMA-
CERASTII	ZIERII
<i>Picea</i> sp.	<i>Quercus marilandica</i>
MELANCONIUM FULIG-	MORENOELLA QUERCINA
INEUM	<i>Quercus</i> spp.
<i>Vitis</i> spp.	MUCILAGO SPONGIOSA
MELANOPSICHIIUM	<i>Cynodon dactylon</i>
AUSTRO-AMERICANA	<i>Fragaria</i> spp.
<i>Polygonum lapathifolium</i>	<i>Ilex</i> spp.
<i>Polygonum pensylvanicum</i>	MYCOSPHAERELLA
MELASMIA HYPOPHYLLA	CARYIGENA
<i>Gleditsia triacanthos</i>	<i>Carya illinoensis</i>
METASPHAERIA SP.	MYCOSPHAERELLA
<i>Echinacea angustifolia</i>	CERCIDICOLA
MICROSPHAERA ALNI	<i>Cercis canadensis</i>
<i>Gleditsia triacanthos</i>	MYCOSPHAERELLA
<i>Ligustrum amurense</i>	FRAGARIAE
<i>Lonicera heckrottii</i>	<i>Fragaria virginiana</i>
<i>Platanus occidentalis</i>	<i>Fragaria</i> spp.
<i>Quercus muhlenbergii</i>	<i>Fraxinus velutina</i>
<i>Quercus rubra</i>	MYCOSPHAERELLA
<i>Quercus stellata</i>	LETHALIS
<i>Syringa persica</i>	<i>Melilotus alba</i>
<i>Syringa vulgaris</i>	MYCOSPHAERELLA
MICROSPHAERA DIFFUSA	POLYMORPHA
<i>Syphoricarpos orbiculatus</i>	<i>Platanus occidentalis</i>
MICROSTROMA JUGLANDIS	MYCOSPHAERELLA
<i>Carya texana</i>	RUBI
MONASCUS PURPUREUS	<i>Rubus</i> spp. (Blackberry)
<i>Sorghum halepense</i>	<i>Rubus</i> sp. (Dewberry)
MONILINIA FRUCTICOLA	<i>Rubus</i> sp. (Loganberry)
<i>Malus sylvestris</i>	<i>Rubus</i> sp. (Raspberry)
<i>Prunus armeniaca</i>	<i>Rubus</i> sp. (Youngberry)
<i>Prunus persica</i>	MYCOSPHAERELLA
<i>Prunus</i> spp. (Cherry)	SENTINA
<i>Prunus</i> spp. (Plum)	<i>Pyrus communis</i>
<i>Vitis</i> spp. (Grape)	

MYCOSPHAERELLA THUJAE
Thuja occidentalis

MYCOSPHAERELLA ULMI
Ulmus fulva

MYCOSPHAERELLA spp.
Quercus spp.
Rubus sp. (Boysenberry)

MYXOSPORIUM HYMENULOIDES
Ulmus pumila

MYXOSPORIUM SP.
Carya illinoensis

NECTRIA CINNABARINA
Ailanthus altissima
Albizzia julibrissin
Althaea sp.
Broussonetia papyrifera
Ficus carica
Juglans regia
Koelreuteria paniculata
Ligustrum vulgare
Melia azedarach
Mimosa sp.
Poinciana gilliesii
Populus deltoides
Sophora japonica
Ulmus americana var.
pendula
Ulmus pumila
Ulmus spp.

NEMATOSPORA CORYLI
Phaseolus aureus
Soja max
Vigna sinensis

NEOFABRAEA MALICORTICIS
Malus sylvestris

NIGROSPORA SPHAERICA
Sorghum vulgare

NUMMULARIA DISCRETA
Malus sylvestris

OPHIOBOLUS CARICETI
Elymus villosus

OPHIOBOLUS GRAMINIS
Hordeum vulgare
Secale cereale

PARODIELLA GRIFFITHSII
Psoralea tenuiflora

PARODIELLA PERISPORIOIDES
Desmodium marilandicum
Psoralea cuspidata
Psoralea tenuiflora var.
floribunda

PELICULARIA FILAMENTOSA
Ipomoea batatas
Lycopersicon esculentum
Phaseolus vulgaris
Rheum rhabonticum
Solanum tuberosum

PELTELLA SP.
Liquidambar styraciflua

PENICILLIUM DIGITATUM
Citrus paradisi

PENICILLIUM GLADIOLI
Gladiolus spp.

PENICILLIUM spp.
Cucumis melo
Dahlia spp.
Gossypium hirsutum
Hyacinthus spp.
Ipomoea batatas
Malus sylvestris
Narcissus spp.
Tulipa spp.
Zea mays

PENIOPHORA spp.
Quercus spp.
Ulmus americana

PERONOSPORA ANTIRRHINI
Antirrhinum majus

PERONOSPORA ARTHURI <i>Oenothera laciniata</i>	PEZICULA CARPINEA <i>Carpinus caroliniana</i>
PERONOSPORA CORYDALIS <i>Corydalis</i> sp.	PHAEOSPHAERELLA PASPALI <i>Paspalum</i> sp.
PERONOSPORA EFFUSA <i>Chenopodium album</i> <i>Monolepis nuttalliana</i> <i>Spinacia oleracea</i>	PHAEOTRYPE SP. <i>Populus</i> spp.
PERONOSPORA LINARIAE <i>Linaria canadensis</i>	PHLEOSPORA ACERIS <i>Acer saccharinum</i>
PERONOSPORA MAN- SHURICA <i>Soja max</i>	PHLEOSPORA MULTI- MACULANS <i>Juglans regia</i>
PERONOSPORA PARASITICA <i>Brassica oleracea</i> var. <i>capitata</i> <i>Capsella bursa-pastoris</i> <i>Descurainia richardsonii</i> spp. <i>incisa</i> <i>Lepidium virginicum</i>	PHOMA BETAE <i>Beta vulgaris</i>
PERONOSPORA SCHLEIDENI <i>Allium cepa</i>	PHOMA BOLTONIAE <i>Boltonia diffusa</i>
PERONOSPORA TRIFOLI- ORUM <i>Medicago sativa</i>	PHOMA CONIDIOWENA <i>Buxus sempervirens</i>
PERONOSPORA VICIAE <i>Pisum sativum</i> var. <i>arvense</i>	PHOMA DESTRUCTIVA <i>Lycopersicon esculentum</i>
PERONOSPORA SPP. <i>Chenopodium</i> sp. <i>Teucrium canadense</i> <i>Valerianella</i> sp.	PHOMA LINGAM <i>Brassica oleracea</i> var. <i>capitata</i>
PESTALOTIA OENOTHERAE <i>Oenothera serrulata</i>	PHOMA MEDICAGINIS <i>Medicago sativa</i>
PESTALOTIA FUNREA <i>Thuja occidentalis</i>	PHOMA POMI <i>Malus sylvestris</i>
PESTALOTIA RHODO- DENDRI <i>Rhododendron</i> spp.	PHOMA RUBICOLA <i>Rubus idaeus</i>
PESTALOTIA SP. <i>Cercis canadensis</i>	PHOMA TERRESTRIS <i>Solanum carolinense</i> <i>Vigna sinensis</i>
	PHOMA SPP. <i>Carya illinoensis</i> <i>Opuntia rafinesquii</i> <i>Perovskia atriplicifolia</i> <i>Sorghum vulgare</i> <i>Vitex agnuscastus</i>

PHOMOPSIS FOVEOLARIS
Euonymus fortunei var.
vegetus

PHOMOPSIS GARDENIAE
Gardenia sp.

PHOMOPSIS JUNIPERO-
 VORA
Juniperus spp.
Thuja occidentalis

PHOMOPSIS VEXANS
Solanum melongena

PHOMOPSIS SP.
Bromus commutatus

PHORADENDRON FLAVE-
 SCENS
Acer spp.
Carya illinoensis
Juglans nigra
Populus deltoides
Quercus marilandica
Quercus rubra f. *triloba*
Quercus stellata
Ulmus alata
Ulmus americana
Ulmus fulva
Ulmus spp.

PHRAGMIDIUM SP.
Rosa spp.

PHYLLACHORA BOUTE-
 LOUAE
Bouteloua curtipendula
Buchloe dactyloides

PHYLLACHORA DIPLO-
 CARPA
Distichlis spicata

PHYLLACHORA GRAMINIS
Panicum virgatum

PHYLLACHORA LUTEO-
 MACULATA
Andropogon furcatus
Andropogon saccharoides
Andropogon scoparius

PHYLLACHORA PUNCTUM
Panicum commutatum
Panicum huachucae var.
fasciculatum
Panicum tennesseense

PHYLLACHORA VULGATA
Muhlenbergia capillaris
Sporobolus cryptandrus

PHYLLACHORA WILSONI
Panicum obtusum
Paspalum stramineum

PHYLLACHORA SP.
Dactylis glomerata

PHYLLACTINIA CORYLEA
Cladrastis lutea
Quercus marilandica

PHYLLOSTICTA APOCYNI
Apocynum cannabinum

PHYLLOSTICTA ARBUTI-
 FOLIA
Aronia sp.

PHYLLOSTICTA ARGYREA
Elaeagnus angustifolia

PHYLLOSTICTA BATATAS
Ipomoea batatas

PHYLLOSTICTA BER-
 BERIDIS
Berberis mentorensis

PHYLLOSTICTA BETULINA
Betula nigra

PHYLLOSTICTA BRUNNEA
Populus alba var.
pyramidalis
Populus angustifolia

PHYLLOSTICTA BUMELII-
 FOLIA
Bumelia lanuginosa

PHYLLOSTICTA CARYAE
Carya ovata

PHYLLOSTICTA CATALPAE <i>Catalpa speciosa</i>	PHYLLOSTICTA LAGER- STROEMIAE <i>Lagerstroemia indica</i>
PHYLLOSTICTA CELTIDIS <i>Celtis occidentalis</i>	PHYLLOSTICTA LAR- PENTAE <i>Ceratostigma plumba- ginoides</i>
PHYLLOSTICTA CERCIDI- COLA <i>Cercis canadensis</i>	PHYLLOSTICTA LIVIDA <i>Quercus stellata</i>
PHYLLOSTICTA CIRCULI- GERENS <i>Rumex altissimus</i>	PHYLLOSTICTA LONI- CERAE <i>Lonicera</i> sp.
PHYLLOSTICTA COM- MONSII <i>Paeonia</i> spp.	PHYLLOSTICTA MAXIMA <i>Rhododendron</i> spp.
PHYLLOSTICTA CONCAVA <i>Opuntia rafinesquii</i>	PHYLLOSTICTA MEDI- CAGINIS <i>Medicago sativa</i>
PHYLLOSTICTA DECIDUA <i>Lycopus americanus</i> <i>Monarda dispersa</i> <i>Monarda punctata</i>	PHYLLOSTICTA MELA- LEUCA <i>Ulmus americana</i>
PHYLLOSTICTA ERRATICA <i>Ulmus americana</i>	PHYLLOSTICTA MINIMA <i>Acer rubrum</i>
PHYLLOSTICTA EUONYMI <i>Euonymus fortunei</i> var. <i>vegetus</i> <i>Euonymus</i> spp.	PHYLLOSTICTA NANDINAE <i>Nandina domestica</i>
PHYLLOSTICTA FRAXINI- COLA <i>Fraxinus velutina</i>	PHYLLOSTICTA OPACA <i>Ilex opaca</i>
PHYLLOSTICTA GROSSU- LARIAE <i>Ribes aureum</i>	PHYLLOSTICTA PAVIAE <i>Aesculus pavia</i>
PHYLLOSTICTA HIBISCINA <i>Hibiscus esculentus</i> <i>Hibiscus rosa-sinensis</i>	PHYLLOSTICTA PHASE- OLINA <i>Phaseolus vulgaris</i> <i>Strophostyles helvola</i> <i>Vigna sinensis</i>
PHYLLOSTICTA ILCICOLA <i>Ilex opaca</i>	PHYLLOSTICTA PODO- PHYLLI <i>Podophyllum peltatum</i>
PHYLLOSTICTA JAPONICA <i>Berberis thunbergii</i>	PHYLLOSTICTA SASSA- FRAS <i>Sassafras albidum</i>

PHYLLOSTICTA SMILACIS	<i>Smilax lanceolata</i>
<i>Smilax glauca</i>	<i>Sorghastrum nutans</i>
PHYLLOSTICTA SOLITARIA	<i>Tribulus terrestris</i>
<i>Malus sylvestris</i>	<i>Ulmus fulva</i>
<i>Pyrus communis</i>	<i>Viburnum rufidulum</i>
PHYLLOSTICTA SORBI	PHYMATOTRICHUM
<i>Sorbus americana</i>	OMNIVORUM
PHYLLOSTICTA SYMPHOR- ICARPI	<i>Celtis occidentalis</i>
<i>Symporicarpos</i> sp.	<i>Gleditsia triacanthos</i>
PHYLLOSTICTA SYRINGAE	<i>Gossypium hirsutum</i>
<i>Syringa vulgaris</i>	<i>Gymnocladus dioica</i>
PHYLLOSTICTA TERM- INALIS	<i>Ipomoea batatas</i>
<i>Forsythia viridissima</i>	<i>Juniperus</i> spp.
PHYLLOSTICTA TUB- EROSA	<i>Ligustrum</i> sp.
<i>Asclepiodora decumbens</i>	<i>Lycopersicon esculentum</i>
PHYLLOSTICTA VIRIDIS	<i>Medicago sativa</i>
<i>Fraxinus americana</i>	<i>Morus alba</i>
PHYLLOSTICTA VITICOLA	<i>Populus</i> spp.
<i>Parthenocissus quinque- folia</i>	<i>Prunus armeniaca</i>
<i>Vitis cinerea</i>	<i>Pyrus communis</i>
<i>Vitis rupestris</i>	<i>Robinia pseudoacacia</i>
PHYLLOSTICTA SPP.	<i>Sapindus drummondii</i>
<i>Bromus inermis</i>	<i>Soja max</i>
<i>Callirhoe involucrata</i>	<i>Ulmus pumila</i>
<i>Carpinus caroliniana</i>	<i>Ulmus</i> spp.
<i>Cicuta maculata</i>	<i>Vigna sinensis</i>
<i>Cocculus carolinus</i>	PHYSALOSPORA OBTUSA
<i>Commelina virginica</i>	<i>Malus sylvestris</i>
<i>Crataegus</i> spp.	<i>Pyrus communis</i>
<i>Euphorbia corollata</i>	PHYSARUM CINEREUM
<i>Ilex</i> spp.	<i>Cynodon dactylon</i>
<i>Koelreuteria paniculata</i>	PHYSODERMA ZEAE- MAYDIS
<i>Lonicera orientalis</i> var.	<i>Zea mays</i>
<i>caucasica</i>	PHYTOMONAS DISSOLVENS
<i>Mahonia aquifolium</i>	<i>Zea mays</i>
<i>Panicum obtusum</i>	PHYTOMONAS LATHYRI
<i>Smilax hispida</i>	<i>Lathyrus odoratus</i>
	<i>Melilotus alba</i>
	PHYTOMONAS RHAPONTICA
	<i>Rheum rhabonticum</i>

PHYTOPHTHORA CAC- TORUM	PLASMOPARA HALSTEDII
<i>Fragaria</i> spp.	<i>Ambrosia trifida</i>
<i>Rheum rhabonticum</i>	<i>Hymenopappus scabiosaeus</i>
<i>Rudbeckia hirta</i>	
PHYTOPHTHORA CAMBIVORA	PLASMOPARA VITICOLA
<i>Castanea pumila</i>	<i>Vitis rupestris</i>
	<i>Vitis</i> spp.
PHYTOPHTHORA CRYPTOGEA	PLENODOMUS DESTRUENS
<i>Antirrhinum majus</i>	<i>Ipomoea batatas</i>
PHYTOPHTHORA FRAGARIAE	PLEOSPHAERULINA
<i>Fragaria</i> spp.	<i>Briosiana</i>
	<i>Medicago sativa</i>
PHYTOPHTHORA TERRESTRIS	PLEOSPOORA TROPAEOLI
<i>Lycopersicon esculentum</i>	<i>Tropaeolum majus</i>
PHYTOPHTHORA SPP.	PLEOSPOORA SP.
<i>Solanum tuberosum</i>	<i>Bromus tectorum</i>
<i>Zinnia elegans</i>	PODOSPHAERA LEUCO- TRICHA
PIGGOTIA FRAXINI	<i>Malus sylvestris</i>
<i>Fraxinus americana</i>	PODOSPHAERA OXYCAN- THAE
PILEOLARIA EFFUSA	<i>Prunus cerasus</i>
<i>Rhus rhomboidea</i>	<i>Prunus</i> spp. (Cherry)
PILEOLARIA PATZCUA- RENSIS	POLYPORUS ARCULARIUS
<i>Rhus trilobata</i>	<i>Quercus</i> spp.
PILEOLARIA TOXICO- DENDRI	POLYPORUS CONCHIFER
<i>Rhus toxicodendron</i>	<i>Ulmus americana</i>
PIRICULARIA GRISEA	POLYPORUS DICHROUS
<i>Cynodon dactylon</i>	<i>Quercus</i> spp.
<i>Digitaria sanguinalis</i>	POLYPORUS DRYADEUS
<i>Setaria lutescens</i>	<i>Quercus alba</i>
	<i>Quercus marilandica</i>
	<i>Quercus</i> spp.
PLASMODIOPHORA BRASSICAE	POLYPORUS DRYOPHILUS
<i>Brassica oleracea</i> var. <i>capitata</i>	<i>Quercus marilandica</i>
PLASMOPARA GERANII	POLYPORUS GILVUS
<i>Geranium carolinianum</i>	<i>Acer</i> spp.
	<i>Betula nigra</i>
	<i>Quercus</i> spp.

POLYPORUS HIRSUTUS	PSEUDOMONAS MORI
<i>Betula nigra</i>	<i>Morus alba</i>
<i>Forsythia</i> spp.	
<i>Quercus</i> spp.	
POLYPORUS OBTUSUS	PSEUDOMONAS PISI
<i>Quercus marilandica</i>	<i>Pisum sativum</i>
POLYPORUS VERSICOLOR	<i>Pisum sativum</i> var.
<i>Fraxinus</i> spp.	<i>arvense</i>
<i>Malus sylvestris</i>	
<i>Quercus macrocarpa</i>	PSEUDOMONAS SYRINGAE
<i>Quercus</i> spp.	<i>Phaseolus lunatus</i>
PORIA SP.	<i>Prunus persica</i>
<i>Prunus serotina</i>	<i>Prunus</i> spp. (Cherry)
PSEUDOMONAS ALBO- PRECIPITANS	<i>Sorghum halepense</i>
<i>Sorghum vulgare</i>	<i>Sorghum vulgare</i>
PSEUDOMONAS ANDRO- POGONI	<i>Vigna catjang</i>
<i>Sorghum vulgare</i>	<i>Vigna sinensis</i>
PSEUDOMONAS ATRO- FACIENS	PSEUDOMONAS TABACI
<i>Triticum aestivum</i>	<i>Nicotiana tabacum</i>
PSEUDOMONAS CORONA- FACIENS	<i>Soja max</i>
<i>Avena sativa</i>	
PSEUDOMONAS GLYCINEA	PSEUDOMONAS WOODSII
<i>Soja max</i>	<i>Dianthus caryophyllus</i>
PSEUDOMONAS LACHRY- MANS	PSEUDOPERONOSPORA
<i>Cucumis sativus</i>	CUBENSIS
PSEUDOMONAS MARGI- NATA	<i>Cucumis melo</i>
<i>Gladiolus</i> spp.	<i>Cucumis sativus</i>
<i>Iris</i> spp.	
PSEUDOMONAS MEDICA- GINIS	PSEUDOPEZIZA MEDI- CAGINIS
<i>Medicago sativa</i>	<i>Medicago sativa</i>
PSEUDOMONAS MEDICA- GINIS var. PHASEOL- ICOLA	PSEUDOPEZIZA TRIFOLII
<i>Phaseolus vulgaris</i>	<i>Trifolium</i> spp.
<i>Pueraria thunbergiana</i>	
	PUCCINIA ABSINTHII
	<i>Artemisia gnaphalodes</i>
	PUCCINIA AMPHIGENA
	<i>Calamovilfa gigantea</i>
	<i>Calamovilfa longifolia</i>
	<i>Smilax bona-nox</i>
	<i>Smilax herbacea</i>
	PUCCINIA ANOMALA
	<i>Hordeum vulgare</i>
	PUCCINIA ANDROPOGONIS
	<i>Andropogon furcatus</i>
	<i>Andropogon glomeratus</i>

<i>Andropogon scoparius</i>	PUCCINIA BOUTELOUAE
<i>Andropogon ternarius</i>	<i>Bouteloua curtipendula</i>
<i>Andropogon virginicus</i>	
PUCCINIA ANDROPO-	PUCCINIA CANALICULATA
GONIS ONOBRYCHIDIS	<i>Cyperus esculentus</i>
<i>Baptisia australis</i>	<i>Cyperus rotundus</i>
<i>Baptisia bracteata</i>	<i>Cyperus strigosus</i>
<i>Dalea enneandra</i>	<i>Cyperus spp.</i>
<i>Xanthium spp..</i>	
PUCCINIA ANDROPO-	PUCCINIA CARICIS
GONIS OXALIDIS	GROSSULARIATA
<i>Oxalis corniculata</i>	<i>Ribes odoratum</i>
PUCCINIA ANDROPO-	PUCCINIA CAULICOLA
GONIS PENTSTEMONIS	<i>Salvia lanceolata</i>
<i>Penstemon jamesii</i>	
<i>Penstemon tenuiflorus</i>	PUCCINIA CENCHRI
	<i>Cenchrus pauciflorus</i>
PUCCINIA ANDROPO-	PUCCINIA CHLORIDIS
GONIS XANTHOXYLI	<i>Chloris verticillata</i>
<i>Zanthoxylum americanum</i>	
<i>Zanthoxylum clava-herculis</i>	PUCCINIA CHRYSANTHEMI
	<i>Chrysanthemum morifolium</i>
PUCCINIA ANTHIRRHINI	<i>Chrysanthemum spp.</i>
<i>Antirrhinum majus</i>	
PUCCINIA ARISTIDAE	PUCCINIA CIRSI
<i>Chenopodium album</i>	<i>Cirsium discolor</i>
<i>Distichlis spicata</i>	<i>Cirsium undulatum</i> var.
<i>Distichlis stricta</i>	<i>megacephalum</i>
PUCCINIA ARUNDINARIAE	PUCCINIA CONOCLINII
<i>Arundinaria gigantea</i>	<i>Eupatorium coelestinum</i>
PUCCINIA ASPARAGI	PUCCINIA CONVOLVULI
<i>Asparagus officinalis</i>	<i>Convolvulus arvensis</i>
PUCCINIA ASTERIS	PUCCINIA CORONATA
<i>Aster drummondii</i>	<i>Avena sativa</i>
PUCCINIA ATROPUNCTA	<i>Lolium multiflorum</i>
<i>Veratrum woodii</i>	<i>Lolium perenne</i>
PUCCINIA BARTHOLOMAEI	<i>Phalaris caroliniana</i>
<i>Asclepias tuberosa</i>	<i>Polypogon monspeliensis</i>
<i>Asclepiodora decumbens</i>	
<i>Asclepiodora viridis</i>	PUCCINIA CRANDALLII
<i>Bouteloua curtipendula</i>	<i>Syphoricarpos orbiculatus</i>
<i>Leptochloa filiformis</i>	
	PUCCINIA CRASSIPES
	<i>Ipomoea purpurea</i>

PUCCINIA CYNODONTIS	<i>Agropyron trachycaulum</i>
<i>Cynodon dactylon</i>	<i>Agrostis alba</i>
PUCCINIA CYPERI	<i>Bromus commutatus</i>
<i>Cyperus filiculmis</i>	<i>Bromus secalinus</i>
<i>Cyperus pseudovegetus</i>	<i>Dactylis glomerata</i>
<i>Cyperus schweinitzii</i>	<i>Elymus canadensis</i>
<i>Cyperus spp.</i>	<i>Elymus glaucus</i>
<i>Erigeron canadensis</i>	<i>Elymus junceus</i>
<i>Erigeron strigosus</i>	<i>Elymus virginicus</i>
PUCCINIA EATONIAE	<i>Hordeum bulbosum</i>
<i>Sphenopholis obtusata</i>	<i>Hordeum pusillum</i>
PUCCINIA ELEOCHARIDIS	<i>Hordeum vulgare</i>
<i>Eleocharis obtusa</i>	<i>Phalaris angusta</i>
<i>Eleocharis tenuis</i>	<i>Secale cereale</i>
<i>Eupatorium serotinum</i>	
PUCCINIA ELLISIANA	
<i>Andropogon scoparius</i>	PUCCINIA GRAMINIS
PUCCINIA EMACULATA	AVENAE
<i>Panicum capillare</i>	<i>Avena sativa</i>
<i>Paspalum stramineum</i>	
PUCCINIA ERAGROSTIDIS	PUCCINIA GRAMINIS
<i>Eragrostis pilosa</i>	PHLEI-PRATENSIS
PUCCINIA EXTENSICOLA	<i>Phleum pratense</i>
ERIGERONTIS	
<i>Carex bicknellii</i>	PUCCINIA GRAMINIS
<i>Carex gravida</i>	TRITICI
<i>Carex vulpinoidea</i>	<i>Triticum aestivum</i>
<i>Erigeron strigosus</i>	<i>Triticum dicoccum</i>
<i>Triticum spelta</i>	
PUCCINIA EXTENSICOLA	PUCCINIA GRINDELIAE
OENOTHERAE	<i>Chrysopsis berlandieri</i>
<i>Oenothera spp.</i>	<i>Hymenopappus carolinensis</i>
PUCCINIA FARINACEA	
<i>Salvia pitcheri</i>	PUCCINIA HELIANTHI
PUCCINIA FLACCIDA	<i>Helianthus annuus</i>
<i>Echinochloa crusgalli</i>	<i>Helianthus hirsutus</i>
PUCCINIA GLUMARUM	<i>Helianthus mollis</i>
<i>Hordeum pusillum</i>	<i>Helianthus petiolaris</i>
PUCCINIA GRAMINIS	<i>Helianthus tuberosus</i>
<i>Aegilops cylindrica</i>	<i>Helianthus spp.</i>
<i>Agropyron dasystachyum</i>	
<i>Agropyron inerme</i>	PUCCINIA HIERACII
<i>Agropyron smithii</i>	<i>Pyrrhopappus carolinianus</i>
	<i>Pyrrhopappus grandiflorus</i>
	<i>Pyrrhopappus multicaulis</i>
	<i>Taraxacum officinale</i>
	PUCCINIA IMPOSITA
	<i>Leptoloma cognatum</i>

PUCCINIA IRIDIS <i>Iris</i> spp.	PUCCINIA PODOPHYLLI <i>Podophyllum peltatum</i>
PUCCINIA IRREQUISITA <i>Centaurea americana</i>	PUCCINIA POLYGONI- AMPHIBII <i>Polygonum lapathifolium</i>
PUCCINIA JONESII <i>Lomatium daucifolium</i> <i>Lomatium orientale</i>	PUCCINIA POLYGONI- AMPHIBII CONVOLVULI <i>Polygonum dumetorum</i> <i>Polygonum scandens</i>
PUCCINIA KANSENSIS <i>Buchloe dactyloides</i>	PUCCINIA POLYGONI- AMPHIBII PERSICARIAE <i>Polygonum hartwrightii</i> <i>Polygonum punctatum</i>
PUCCINIA LUXURIOSA <i>Sporobolus airoides</i>	PUCCINIA PURPUREA <i>Sorghum halepense</i> <i>Sorghum vulgare</i>
PUCCINIA MALVACEARUM <i>Althaea rosea</i> <i>Malva rotundifolia</i>	PUCCINIA RUBIGO-VERA AGROPYRINA <i>Bromus commutatus</i> <i>Lolium perenne</i>
PUCCINIA MENTHAE <i>Monarda fistulosa</i> var. <i>mollis</i> <i>Pycnanthemum pilosum</i>	PUCCINIA RUBIGO-VERA AGROPYRINA <i>Agropyron smithii</i> <i>Clematis</i> sp. <i>Elymus virginicus</i>
PUCCINIA MILLEFOLII <i>Artemisia ludoviciana</i>	PUCCINIA RUBIGO-VERA APOCRYPTA <i>Ellisia nyctelea</i>
PUCCINIA OBLIQUA <i>Gonolobus laevis</i> <i>Philibertia cyananchoides</i> <i>Vincetoxicum</i> sp.	PUCCINIA RUBIGO-VERA IMPATIENTIS <i>Elymus canadensis</i> <i>Elymus virginicus</i>
PUCCINIA OBTECTA <i>Scirpus americanus</i>	PUCCINIA RUBIGO-VERA SECALIS <i>Secale cereale</i>
PUCCINIA OBTEGENS <i>Cirsium undulatum</i> var. <i>megacephalum</i>	PUCCINIA RUBIGO-VERA TRITICI <i>Agropyron trichophoron</i> <i>Triticum aestivum</i> <i>Triticum spelta</i>
PUCCINIA PANICI <i>Euphorbia marginata</i> <i>Panicum virgatum</i>	
PUCCINIA PERIDERMIOS- PORA <i>Fraxinus</i> spp. <i>Spartina gracilis</i> <i>Spartina pectinata</i>	
PUCCINIA PHRAGMITIS <i>Rumex venosus</i>	

PUCCINIA SCHEDONNARDI

- Callirhoe digitata*
- Callirhoe involucrata*
- Gossypium hirsutum*
- Muhlenbergia mexicana*
- Muhlenbergia schreberi*
- Triplasis purpurea*

PUCCINIA SESSILIS

- Phalaris angusta*
- Smilacina racemosa*

PUCCINIA SEYMOURIANA

- Apocynum sibiricum*
- Spartina pectinata*

PUCCINIA SHERARDIANA

- Sphaeralcea coccinea*

PUCCINIA SIMULANS

- Sporobolus cryptandrus*

PUCCINIA SMILACIS

- Smilax bona-nox*
- Smilax glauca*
- Smilax rotundifolia*
- Smilax spp.*

PUCCINIA SORGHI

- Oxalis filipes*
- Oxalis violacea*
- Zea mays*

PUCCINIA SUBSTRIATA

- Paspalum stramineum*

PUCCINIA TRIPSACI

- Andropogon furcatus*

PUCCINIA TUMIDIPES

- Lycium pallidum*

PUCCINIA VERNONIAE

- Vernonia baldwini*
- Vernonia crinita*
- Vernonia interior*

PUCCINIA VEXANS

- Bouteloua curtipendula*

PUCCINIA VILFAE

- Sporobolus asper*
- Sporobolus neglectus*
- Verbena canadensis*
- Verbena stricta*
- Verbena urticifolia*

PUCCINIA VIOLAE

- Viola missouriensis*
- Viola papilionacea*
- Viola sp.*

PUCCINIA VIRGATA

- Sorghastrum nutans*

PUCCINIA WINDSORIAE

- Ptelea trifoliata*
- Triodia flava*

PUCCINIA XANTHII

- Ambrosia artemisiifolia*
- Ambrosia trifida*
- Xanthium canadense*
- Xanthium chinense*
- Xanthium inflexum*
- Xanthium italicum*
- Xanthium orientale*
- Xanthium speciosum*
- Xanthium spp.*

PYRENOCHAETA SP.

- Glyceria striata*

PYRENOPEZIZA MEDI-CAGINIS

- Medicago sativa*

PYRENOPHORA COMATA

- Petalostemum oligophyllum*
- Petalostemum purpureum*

PYTHIUM APHANIDER-

- MATUM*
- Lycopersicon esculentum*
- Phaseolus vulgaris*
- Raphanus sativus*

PYTHIUM ARRHENOMANES

- Sorghum vulgare*

PYTHIUM DEBARYANUM	<i>Raphanus sativus</i>
<i>Euphorbia pulcherrima</i>	<i>Solanum tuberosum</i>
<i>Zea mays</i>	<i>Zea mays</i>
PYTHIUM SPP.	RHIZOCTONIA SPP.
<i>Citrullus vulgaris</i>	<i>Cynodon dactylon</i>
<i>Ipomoea batatas</i>	<i>Triticum aestivum</i>
<i>Lactuca sativa</i>	RHIZOPUS NIGRICANS
<i>Piqueria trinervia</i>	<i>Fragaria</i> spp.
<i>Triticum aestivum</i>	<i>Gossypium hirsutum</i>
RAMULARIA CEPHALANTHI	<i>Ipomoea batatas</i>
<i>Cephalanthus occidentalis</i>	<i>Prunus persica</i>
RAMULARIA HAMAMELIDIS	<i>Zea mays</i>
<i>Hamamelis virginiana</i>	RHYNCHOSPORIUM
RAMULARIA MONILOIDES	SECALIS
<i>Myrica cerifera</i>	<i>Hordeum vulgare</i>
RAMULARIA OBOVATA	RHYTISMA ACERINUM
<i>Rumex crispus</i>	<i>Acer</i> spp.
<i>Rumex hastatulus</i>	RHYTISMA VACCINII
<i>Rumex venosus</i>	<i>Gaylussacia</i> spp.
RAMULARIA VERONICAE	<i>Vaccinium</i> sp.
<i>Veronica peregrina</i>	RHYTISMA SP.
RAVENELIA EPIPHYLLA	<i>Ilex decidua</i>
<i>Tephrosia virginiana</i>	SCHIZOPHYLLUM
RHIZOCTONIA SOLANI	COMMUNE
<i>Acer saccharinum</i>	<i>Acer</i> spp.
<i>Agrostis</i> sp.	<i>Carya illinoensis</i>
<i>Antirrhinum majus</i>	<i>Malus sylvestris</i>
<i>Arachis hypogaea</i>	<i>Prunus</i> spp. (Cherry)
<i>Callistephus chinensis</i>	SCHIZOPHYLLUM SP.
<i>Cyamopsis tetragonoloba</i>	<i>Ipomoea batatas</i>
<i>Epidendrum</i> sp.	SCLEROSPORA FARLOWII
<i>Fragaria</i> spp.	<i>Cynodon dactylon</i>
<i>Fraxinus</i> spp.	SCLEROSPORA GRAMIN- ICOLA
<i>Gossypium hirsutum</i>	<i>Zea mays</i>
<i>Hibiscus esculentus</i>	SCLEROSPORA MACROS- PORA
<i>Jasminum humile</i>	<i>Hordeum vulgare</i>
<i>Lathyrus odoratus</i>	SCLEROTINIA TRIFOL- IORUM
<i>Linum usitatissimum</i>	<i>Trifolium</i> spp.
<i>Lycopersicon esculentum</i>	
<i>Medicago sativa</i>	
<i>Pisum sativum</i>	
<i>Prunus</i> spp. (Plum)	

SCLEROTIUM BATATICOLA

Arachis hypogaea
Bouteloua curtipendula
Catalpa speciosa
Chrysanthemum spp.
Crotalaria spp.
Gossypium hirsutum
Ipomoea batatas
Juniperus virginiana
Medicago sativa
Phaseolus aureus
Soja max
Solanum tuberosum
Sorghum vulgare
Sorghum vulgare var.
sudanense
Sorghum vulgare var.
technicum
Verbena hybrida
Vigna sinensis
Zea mays
Zinnia elegans

SCLEROTIUM ROLFSII

Allium cepa
Aquilegia sp.
Arachis hypogaea
Gossypium hirsutum
Ipomoea batatas
Lycopersicon esculentum
Physostegia virginiana
Solanum tuberosum
Vigna sinensis

SCLEROTIUM SCLEROTIORUM

Lactuca sativa

SCOLOCOTRICHUM GRAMINIS

Alopecurus carolinianus
Alopecurus geniculatus
Dactylis glomerata
Hordeum pusillum
Hordeum vulgare

SCOLOCOTRICHUM MACULICOLA

Arundo donax
Phragmites communis

SELENOPHOMA spp.

Sporobolus asper var.
hookeri
Sporobolus vaginiflorus
Triodia flava
Triodia stricta

SEPTORIA ANDROPOGONIS

Andropogon furcatus

SEPTORIA APII

Apium graveolens var.
dulce

SEPTORIA ARGEMONES

Argemone mexicana

SEPTORIA ASTERINA

Aster drummondii

SEPTORIA BATATICOLA

Ipomoea batatas

SEPTORIA BETAE

Beta vulgaris

SEPTORIA BROMI

Bromus carinatus
Bromus commutatus
Bromus purgans
Bromus secalinus
Bromus texensis

SEPTORIA CACALIAE

Cacalia tuberosa

SEPTORIA CENTAUREI-

COLA var. BREVISPORA

Centaurea americana

SEPTORIA CHRYSANTHE-

MELLA

Chrysanthemum spp.

SEPTORIA CONVOLVULI	<i>Convolvulus arvensis</i>	SEPTORIA IRREGULARIS	<i>Rhus toxicodendron</i>
SEPTORIA CORNICOLA	<i>Cornus asperifolia</i>	SEPTORIA JATHROPHAE	<i>Cnidoscolus texanus</i>
	<i>Cornus stolonifera</i>	SEPTORIA LACTUCICOLA	<i>Lactuca canadensis</i>
SEPTORIA CYANI	<i>Centaurea cyanus</i>	SEPTORIA LAMII	<i>Lamium amplexicaule</i>
SEPTORIA DIVARICATA	<i>Phlox</i> sp.	SEPTORIA LAVANDULAE	<i>Lavandula</i> sp.
SEPTORIA DRYINA	<i>Quercus coccinea</i>	SEPTORIA LEPTOSTACHYA	<i>Phryma leptostachya</i>
	<i>Quercus marilandica</i>	SEPTORIA LINICOLA	<i>Linum usitatissimum</i>
	<i>Quercus palustris</i>	SEPTORIA LIQUIDAMBARIS	<i>Liquidambar styraciflua</i>
SEPTORIA ELYMI	<i>Elymus canadensis</i>	SEPTORIA LOBELIAE	<i>Lobelia cardinalis</i>
			<i>Lobelia siphilitica</i>
SEPTORIA ERIGERONTIS	<i>Erigeron canadensis</i>	SEPTORIA LYCOPERSICI	<i>Lycopersicon esculentum</i>
	<i>Erigeron strigosus</i>	SEPTORIA MACROSPORIA	<i>Chrysanthemum</i> spp.
SEPTORIA ERIGERONTIS	var. BOLTONIAE	SEPTORIA MAGNOLIAE	<i>Magnolia</i> spp.
	<i>Boltonia diffusa</i>	SEPTORIA MALVICOLA	<i>Althaea rosea</i>
	<i>Boltonia latisquama</i>	SEPTORIA MUNROAE	<i>Munroa squarrosa</i>
SEPTORIA FRAXINI	<i>Fraxinus nigra</i>	SEPTORIA MUSIVA	<i>Populus deltoides</i>
	<i>Fraxinus</i> spp.	SEPTORIA NODORUM	<i>Bromus</i> sp.
SEPTORIA GAILLARDIAE	<i>Gaillardia aristata</i>		<i>Triticum aestivum</i>
	<i>Gaillardia pulchella</i>	SEPTORIA OENOTHERAE	<i>Oenothera biennis</i>
	<i>Gaillardia</i> sp.		<i>Oenothera lacinata</i>
SEPTORIA GAURINA	<i>Gaura biennis</i>		
	<i>Gaura coccinea</i>		
SEPTORIA GLADIOLI	<i>Gladiolus</i> spp.		
SEPTORIA HELIANTHI	<i>Helianthus annuus</i>		
	<i>Helianthus</i> spp.		
SEPTORIA INCONSPICUA	<i>Plantago purshii</i>		

Oenothera missouriensis
Oenothera missouriensis
 var. *incana*
Oenothera oklahomensis
Oenothera pallida
Oenothera rhombipetala
Oenothera speciosa

SEPTORIA PASSERINI
Hordeum vulgare

SEPTORIA PETROSELINI
Petroselinum crispum

SEPTORIA PISI
Pisum sativum

SEPTORIA POLYGONORUM
Polygonum pennsylvanicum

SEPTORIA POPULI
Populus deltoides

SEPTORIA PTELEAE
Ptelea trifoliata

SEPTORIA PYRICOLA
Pyrus communis

SEPTORIA RIBIS
Ribes odoratum
Ribes spp.

SEPTORIA RUBI
Rubus spp. (Blackberry)
Rubus sp. (Dewberry)

SEPTORIA RUDBECKIAE
Rudbeckia hirta

SEPTORIA RUMICIS
Rumex altissimus

SEPTORIA SAMBUCINA
Sambucus canadensis

SEPTORIA SCUTELLARIAE
Scutellaria integrifolia
Scutellaria parvula

SEPTORIA SISYMBRII
Descurainia richardsonii
 ssp. *incisa*

SEPTORIA SPECULARIAE
Specularia biflora
Specularia perfoliata

SEPTORIA TRILLII
Trillium recurvatum

SEPTORIA TRITICI
Triticum aestivum

SEPTORIA ULCEROSA
Ulmus spp.

SEPTORIA VALERIANELLAE
Valerianella radiata

SEPTORIA VERBASCICOLA
Verascum blattaria

SEPTORIA VERBENAE
Verbena bracteata
Verbena canadensis
Verbena pumila
Verbena urticifolia

SEPTORIA WISTARIAE
Wistaria sp.

SEPTORIA SPP.
Agropyron cristatum
Agropyron trachycaulum
Aplopappus ciliatus
Bouleloua curtipendula
Bouteloua gracilis
Carthamus tinctorius
Chrysanthemum frutescens
Cynodon dactylon
Dactylis glomerata
Fuchsia sp.
Manisuris cylindrica
Panicum clandestinum
Panicum virgatum
Plantago major
Pyrrhopappus carolinianus
Pyrrhopappus multicaulis
Silene antirrhina
Solidago spp.
Sporobolus clandestinus

SOROSPORIUM ELLISII
Andropogon furcatus

SOROSPORIUM SYNTHER- ISMAE	SPORIDESMIUM CAPSUL- ARUM
<i>Cenchrus pauciflorus</i>	<i>Catalpa speciosa</i>
<i>Digitaria sanguinalis</i>	
SPHAECLOTHECA CRUENTA	SPORONEMA PHACIDIOIDES
<i>Sorghum halepense</i>	<i>Medicago sativa</i>
<i>Sorghum vulgare</i>	
SPHAECLOTHECA OCCI- DENTALIS	STAGONOSPORA
<i>Andropogon furcatus</i>	<i>ARENARIA</i>
<i>Andropogon scoparius</i>	<i>Bouteloua curtipendula</i>
SPHAECLOTHECA REILIANA	STAGONOSPORA ISCHAEMI
<i>Sorghum vulgare</i>	<i>Andropogon furcatus</i>
<i>Zea mays</i>	<i>Andropogon hallii</i>
SPHAECLOTHECA SORGHI	STAGONOSPORA SPP.
<i>Sorghum halepense</i>	<i>Axonopus compressus</i>
<i>Sorghum vulgare</i>	<i>Sorghastrum nutans</i>
SPHAEROPSIS LINEARIS	STEMPHYLIUM BOTRY- OSUM
<i>Carya cordiformis</i>	<i>Allium cepa</i>
<i>Carya ovata</i>	
SPHAEROPSIS MORI	STEMPHYLIUM TRITICI
<i>Morus</i> sp.	<i>Triticum aestivum</i>
SPHAEROPSIS RHAMNI	STEREUM ALBOBADIUM
<i>Rhamnus cathartica</i>	<i>Forsythia</i> spp.
SPHAEROPSIS SYRINGAE	STEREUM FASCIATUM
<i>Syringa vulgaris</i>	<i>Quercus</i> spp.
SPHAEROPSIS ULMICOLA	STEREUM FRUSTULOSUM
<i>Ulmus</i> spp.	<i>Quercus</i> spp.
SPHAEROPSIS SPP.	STEREUM LOBATUM
<i>Juniperus virginiana</i>	<i>Quercus</i> spp.
<i>Prunus</i> spp. (Plum)	STEREUM PURPUREUM
SPHAEROTHECA HUMULI	<i>Celtis</i> sp.
<i>Fragaria</i> spp.	<i>Prunus persica</i>
SPHAEROTHECA PANNOSA	<i>Syringa vulgaris</i>
<i>Rosa</i> spp.	STEREUM RAMEALE
SPHAEROTHECA SP.	<i>Betula nigra</i>
<i>Rosa</i> spp.	<i>Quercus</i> spp.
SPONGOSPORA SUBTER- RANEA	STEREUM SP.
<i>Solanum tuberosum</i>	<i>Quercus macrocarpa</i>
	SYNCHYTRIUM FULGENS
	<i>Oenothera lacinata</i>

SYNCHYTRIUM GERANII <i>Geranium carolinianum</i>	TRAMETES SEPIUM <i>Quercus</i> spp.
SYNCHYTRIUM STELLARIAE <i>Stellaria media</i>	TRANZSCHELIA PRUNISPINOSAE <i>Prunus americana</i>
TAPHRINA CAERULESCENS <i>Quercus alba</i> <i>Quercus marilandica</i> <i>Quercus rubra f. triloba</i> <i>Quercus</i> spp.	<i>Prunus angustifolia</i> <i>Prunus besseyi</i> <i>Prunus munsoniana</i> <i>Prunus orthosepala</i> <i>Prunus</i> spp. (Cherry) <i>Prunus</i> spp. (Plum)
TAPHRINA COMMUNIS <i>Prunus americana</i> <i>Prunus</i> spp. (Cherry) <i>Prunus</i> spp. (Plum)	TRICHODERMA KONINGI <i>Ipomoea batatas</i>
TAPHRINA DEARNESSII <i>Acer rubrum</i>	TUBERCULINA FLAVOGRANULATA <i>Desmodium paniculatum</i>
TAPHRINA DEFORMANS <i>Prunus persica</i>	TYLENCHUS DIPSACI <i>Ipomoea batatas</i> <i>Medicago sativa</i>
TAPHRINA MIRABILIS <i>Prunus angustifolia</i> <i>Prunus</i> sp.	UNCINULA MACROSPORA <i>Ulmus alata</i> <i>Ulmus fulva</i>
TAPHRINA ROBINSONIANA <i>Alnus incana</i>	UNCINULA NECATOR <i>Vitis</i> spp.
TAPHRINA ULCEROSA <i>Ulmus fulva</i> <i>Ulmus pumila</i>	UNCINULA PARVULA <i>Celtis</i> spp.
THIELAVIA BASICOLA <i>Nicotiana tabacum</i>	UROCYSTIS AGROPYRI <i>Elymus virginicus</i>
TILLETIA CARIES <i>Triticum aestivum</i>	UROCYSTIS CEPULAE <i>Allium cepa</i>
TILLETIA FOETIDA <i>Triticum aestivum</i>	UROCYSTIS OCCULTA <i>Secale cereale</i>
TILLETIA OKLAHOMAE <i>Aristida longespica</i>	UROMYCES CALADII <i>Arisaema dracontium</i> <i>Arisaema triphyllum</i>
TILLETIA PULCHERRIMA <i>Panicum virgatum</i>	UROMYCES CARYOPHYLLINUS <i>Dianthus caryophyllus</i>
TILLETIA TEXANA <i>Hordeum pusillum</i>	

UROMYCES DACTYLIDIS	UROMYCES PHASEOLI
<i>Dactylis glomerata</i>	STROPHOSTYLIS
UROMYCES DICTYOS- PERMA	<i>Strophostyles helvola</i>
<i>Euphorbia dictyosperma</i>	<i>Strophostyles pauciflora</i>
UROMYCES ELEGANS	UROMYCES PHASEOLI
<i>Trifolium carolinianum</i>	TYPICA
<i>Trifolium procumbens</i>	<i>Phaseolus vulgaris</i>
UROMYCES ERAGROSTIDIS	UROMYCES PHASEOLI
<i>Eragrostis pectinacea</i>	VIGNAE
<i>Eragrostis spectabilis</i>	<i>Vigna sinensis</i>
UROMYCES GRAMINICOLA	UROMYCES PLUMBARIUS
<i>Aegilops cylindrica</i>	<i>Gaura biennis</i>
<i>Panicum virgatum</i>	<i>Gaura coccinea</i>
<i>Stillingia sylvatica</i>	<i>Gaura sinuata</i>
UROMYCES HEDYSARI- PANICULATI	<i>Oenothera biennis</i>
<i>Desmodium paniculatum</i>	<i>Oenothera laciniiata</i>
<i>Desmodium sessilifolium</i>	UROMYCES PRIMAVERILIS
UROMYCES HORDEINUS	<i>Nothoscordum bivalve</i>
<i>Hordeum pusillum</i>	UROMYCES PROEMINENS
<i>Nothoscordum bivalve</i>	EUPHORBIICOLA
UROMYCES JUNCI	<i>Euphorbia humistrata</i>
<i>Helianthus petiolaris</i>	<i>Euphorbia maculata</i>
UROMYCES LESPEDEZAE- PROCUMBENTIS	<i>Euphorbia stictospora</i>
<i>Lespedeza hirta</i>	UROMYCES PROEMINENS
<i>Lespedeza intermedia</i>	MYRISTICA
<i>Lespedeza procumbens</i>	<i>Euphorbia marginata</i>
<i>Lespedeza repens</i>	UROMYCES PROEMINENS
<i>Lespedeza stuevi</i>	POINSETTIAE
<i>Lespedeza violacea</i>	<i>Euphorbia dentata</i>
<i>Lespedeza virginica</i>	<i>Euphorbia marginata</i>
UROMYCES PECKIANUS	UROMYCES PROEMINENS
<i>Aristida basiramea</i>	TYPICA
<i>Aristida curtissii</i>	<i>Euphorbia maculata</i>
<i>Aristida desmantha</i>	UROMYCES PSORALEAE
<i>Aristida longespica</i>	ARGOPHYLLAE
<i>Aristida oligantha</i>	<i>Psoralea tenuiflora</i>
<i>Plantago aristata</i>	<i>Psoralea tenuiflora</i> var.
<i>Plantago heterophylla</i>	<i>floribunda</i>
<i>Plantago purshii</i>	UROMYCES SPERMACOCES
<i>Plantago virginica</i>	<i>Diodia teres</i>

UROMYCES STRIATUS	USTILAGO STRIAEFORMIS
MEDICAGINIS	<i>Elymus virginicus</i>
<i>Medicago lupulina</i>	<i>Poa pratensis</i>
<i>Medicago sativa</i>	
UROMYCES TRIFOLII	USTILAGO TRICUSPIDIS
FALLENS	<i>Triodia flava</i>
<i>Trifolium pratense</i>	
UROMYCES ZYGADENI	USTILAGO TRITICI
<i>Zygadenus nuttallii</i>	<i>Secale cereale</i>
UROPYXIS AMORPHAE	<i>Triticum aestivum</i>
<i>Amorpha canescens</i>	
<i>Amorpha fruticosa</i>	
USTILAGO AVENAE	USTILAGO ZEAE
<i>Avena sativa</i>	<i>Euchlaena</i> sp.
USTILAGO BOUTELOUAE	USTILAGO SP.
<i>Bouteloua gracilis</i>	<i>Andropogon saccharoides</i>
<i>Bouteloua hirsuta</i>	
USTILAGO BULLATA	VALSA AMBIENS
<i>Bromus catharticus</i>	<i>Malus sylvestris</i>
<i>Bromus inermis</i>	
USTILAGO CRUS-GALLI	VALSA CELTIDIS
<i>Echinochloa crusgalli</i>	<i>Celtis occidentalis</i>
USTILAGO CYNODONTIS	VALSA LEUCOSTOMA
<i>Cynodon dactylon</i>	<i>Malus sylvestris</i>
USTILAGO HORDEI	<i>Prunus persica</i>
<i>Hordeum vulgare</i>	<i>Prunus</i> spp. (Cherry)
USTILAGO KOLLERI	VALSA MACROCARPA
<i>Avena sativa</i>	<i>Quercus macrocarpa</i>
USTILAGO MAYDIS	VALSA SPP.
<i>Zea mays</i>	<i>Albizzia julibrissin</i>
USTILAGO MINIMA	<i>Populus</i> spp.
<i>Stipa comata</i>	<i>Robinia pseudoacacia</i>
USTILAGO NIGRA	VALSARIA ALLANTOSPORA
<i>Hordeum vulgare</i>	<i>Acer negundo</i>
USTILAGO NUDA	VENTURIA INAEQUALIS
<i>Hordeum vulgare</i>	<i>Malus sylvestris</i>
USTILAGO RABENHOR-	<i>Pyracantha coccinea</i> var.
STIANA	<i>lalandii</i>
<i>Digitaria sanguinalis</i>	
	VENTURIA PYRINA
	<i>Pyrus communis</i>
	VERMICULARIA COMPACTA
	<i>Dahlia</i> spp.

VERTICILLIUM ALBOAT-RUM	XANTHOMONAS TRANS-LUCENS f. sp. UNDULOSA
<i>Antirrhinum majus</i>	<i>Triticum aestivum</i>
<i>Gossypium hirsutum</i>	
XANTHOMONAS CAMPES-TRIS	XANTHOMONAS VESCI-CATORIA
<i>Brassica oleracea</i> var. <i>botrytis</i>	<i>Capsicum frutescens</i>
<i>Brassica oleracea</i> var. <i>capitata</i>	<i>Lycopersicon esculentum</i>
XANTHOMONAS GUM-MISUDANS	XANTHOMONAS VIGNICOLA
<i>Gladiolus</i> spp.	<i>Vigna sinensis</i>
XANTHOMONAS HOLCICOLA	XYLARIA MALI
<i>Sorghum halepense</i>	<i>Malus sylvestris</i>
<i>Sorghum vulgare</i>	XYLARIA SP.
XANTHOMONAS JUGLANDIS	<i>Prunus</i> spp.
<i>Juglans regia</i>	VIRUS DISEASES:
XANTHOMONAS MALVA-CEARUM	ASTER YELLOWS
<i>Gossypium arboreum</i>	<i>Erigeron strigosus</i>
<i>Gossypium barbadense</i>	<i>Lactuca sativa</i>
<i>Gossypium contextum</i>	BUNCH DISEASE
<i>Gossypium herbaceum</i>	<i>Carya illinoensis</i>
<i>Gossypium hirsutum</i>	CURLY TOP
<i>Gossypium peruvianum</i>	<i>Lycopersicon esculentum</i>
<i>Gossypium sturti</i>	<i>Spinacia oleracea</i>
XANTHOMONAS PHASEOLI	DOUBLE-VIRUS STREAK
<i>Phaseolus aureus</i>	<i>Lycopersicon esculentum</i>
<i>Phaseolus vulgaris</i>	LEAF CURL
<i>Vigna sinensis</i>	<i>Rubus</i> sp. (Raspberry.)
XANTHOMONAS PHASEOLI	LEAF ROLL
var. SOJENSE	<i>Solanum tuberosum</i>
<i>Soja max</i>	ALFALFA MOSAIC
XANTHOMONAS PRUNI	<i>Medicago sativa</i>
<i>Prunus armeniaca</i>	CARNATION MOSAIC
<i>Prunus persica</i>	<i>Dianthus caryophyllus</i>
<i>Prunus persica</i> var. <i>nectarina</i>	CELERY MOSAIC
<i>Prunus</i> spp. (Cherry)	<i>Apium graveolens</i> var. <i>dulce</i>
<i>Prunus</i> spp. (Plum)	COMMON BEAN MOSAIC
	<i>Phaseolus vulgaris</i>

CUCUMBER MOSAIC	RINGSPOT
<i>Cucumis melo</i>	<i>Antirrhinum majus</i>
<i>Cucumis sativus</i>	
<i>Cucurbita maxima</i>	
<i>Pentunia hybrida</i>	ROSETTE
<i>Spinacia oleracea</i>	<i>Prunus persica</i>
DAHLIA MOSAIC	SINGLE-VIRUS STREAK
<i>Dahlia</i> spp.	<i>Lycopersicon esculentum</i>
MILD MOSAIC	SPINDLE TUBER
<i>Solanum tuberosum</i>	<i>Solanum tuberosum</i>
NARCISSUS MOSAIC	STRAWBERRY CRINKLE
<i>Narcissus</i> spp.	<i>Fragaria</i> spp.
ORNITHOGALUM MOSAIC	WESTERN YELLOW BLIGHT
<i>Ornithogalum thyrsoides</i>	<i>Lycopersicon esculentum</i>
var. <i>aureum</i>	
PHYTOLACCA MOSAIC	WITCHES BROOM
<i>Phytolacca americana</i>	<i>Solanum tuberosum</i>
RUGOSE MOSAIC	YELLOWS
<i>Solanum tuberosum</i>	<i>Prunus persica</i>
TOBACCO MOSAIC	NONPARASITIC DISEASES:
<i>Nicotiana tabacum</i>	BITTER PIT
TOMATO MOSAIC	<i>Malus sylvestris</i>
<i>Lycopersicon esculentum</i>	BLACK HEART
MOSAIC	<i>Solanum tuberosum</i>
<i>Amaryllis</i> spp.	BLACK LEAF SPOT
<i>Capsicum frutescens</i>	<i>Diospyros virginiana</i>
<i>Cyamopsis tetragonoloba</i>	BLAST
<i>Melilotus alba</i>	<i>Avena sativa</i>
<i>Prunus persica</i>	BLOSSOM-END ROT
<i>Rubus</i> sp. (Raspberry)	<i>Lycopersicon esculentum</i>
<i>Setaria italica</i>	BROWNING
<i>Soja max</i>	<i>Pinus</i> spp.
<i>Triticum aestivum</i>	BUD DROP
<i>Vigna sinensis</i>	<i>Gardenia</i> sp.
<i>Zea mays</i>	CATFACE
<i>Zinnia elegans</i>	<i>Lycopersicon esculentum</i>
PHONY DISEASE	DROUGHT INJURY
<i>Prunus persica</i>	<i>Gossypium hirsutum</i>
PURPLE TOP WILT	<i>Medicago sativa</i>
<i>Solanum tuberosum</i>	<i>Thuja occidentalis</i>

ENLARGED LENTICELS	MEASLES
<i>Solanum tuberosum</i>	<i>Vitis</i> spp.
FASCIATION	POTASH DEFICIENCY
<i>Antirrhinum majus</i>	<i>Gossypium hirsutum</i>
<i>Ipomoea batatas</i>	
FROST INJURY	ROSETTE
<i>Malus sylvestris</i>	<i>Carya illinoensis</i>
<i>Prunus persica</i>	
<i>Prunus</i> spp. (Cherry)	SUN SCALD
<i>Prunus</i> spp. (Plum)	<i>Prunus</i> spp. (Plum)
<i>Pyrus communis</i>	<i>Thuja occidentalis</i>
<i>Rubus</i> spp. (Blackberry)	SUN SCORCH
<i>Rubus</i> sp. (Raspberry)	<i>Gossypium hirsutum</i>
HAIL INJURY	TIP BLIGHT
<i>Prunus persica</i>	<i>Antirrhinum majus</i>
HAIR SPROUT	TIPBURN
<i>Solanum tuberosum</i>	<i>Lactuca sativa</i>
HEAT CANKER	<i>Solanum tuberosum</i>
<i>Linum usitatissimum</i>	
HEAT INJURY	WATER BERRY
<i>Medicago sativa</i>	<i>Vitis</i> spp.
HOLLOW HEART	WATER CORE
<i>Solanum tuberosum</i>	<i>Malus sylvestris</i>
IRON DEFICIENCY	WINTER BROWNING
<i>Sorghum vulgare</i>	<i>Magnolia</i> spp.
JONATHON SPOT	WINTER INJURY
<i>Malus sylvestris</i>	<i>Medicago sativa</i>
KELSEY SPOT	UNDETERMINED DISEASES:
<i>Prunus</i> spp. (Plum)	ANGULAR YELLOW SPOT
JUNE YELLOWS	<i>Prunus persica</i>
<i>Fragaria</i> spp.	BROWN BLOTCH
LEAF VARIEGATION	<i>Pyrus communis</i>
<i>Fragaria</i> spp.	MEASLES
LIGHTNING INJURY	<i>Malus sylvestris</i>
<i>Gossypium hirsutum</i>	STIPPLE SPOT
MANGANESE DEFICIENCY	<i>Prunus persica</i>
<i>Gossypium hirsutum</i>	

INDEX TO COMMON NAMES OF HOSTS

Actinea, Fineleaf	8	Bean, Lima	73
Ailanthus, Treeofheaven	9	Bean, Mung	73
Albizzia, Silktree	9	Beautyberry, American	22
Alder	10	Beautyberry, Purple	22
Alder, Hazel	10	Beautybush	56
Alder, Speckled	10	Bedstraw, Catchweed	44
Alfalfa	65	Beebalm	66
Amaranth, Redroot	10	Beebalm, Purple Lemon	66
Amaranth, Spiny	10	Beebalm; Soft Wild-	
Amaryllis	11	bergamot	66
Amorpha, Indigobush	11	Beebalm, Spotted	67
Amorpha, Leadplant	11	Beet, Common	18
Anglepod	46, 111	Bentgrass	9
Antelopehorn, Spider	16	Bentgrass, Autumn	9
Anthurium, Flamingo	13	Bentgrass, Creeping	9
Anthurium, Giant		Bentgrass, Winter	9
Flamingo	13	Bermudagrass	34
Apple	63	Bindweed, Field	30
Apricot	79	Birch, Paper	19
Arborvitae, Eastern	103	Birch, River	19
Ash	43	Blackberry	89
Ash, Black	43	Blackberry, Swamp	89
Ash, Green	43	Blackberrylily	18
Ash, Red	43	Blackeyedsusan	91
Ash, Toumey	43	Bladdernut, American	101
Ash, Velvet	43	Bladdersenna, Common	30
Ash, White	43	Blue-eyedgrass	94
Asparagus, Garden	17	Bluegrass, Big	77
Aspen	79	Bluegrass, Canada	77
Aspidistra, Common	17	Bluegrass, Canby	77
Aster, Drummond	17	Bluegrass, Kentucky	77
Aster, Heath	17	Bluestem	13
Aster, Willowleaf	17	Big	12
Azalea, Pinxterbloom	87	Bushy	12
Balloonflower	77	Eastindies	12
Barberry, Japanese	18	Little	12
Barberry, Mentor	18	Sand	12
Barley	50	Silver	12
Barley, Bulbous	50	Yellowsedge	13
Barley, Little	50	Boltonia, Panicled	19
Barnyardgrass	38	Boltonia, Violet	19
Basswood	103	Box, Common	22
Beakgrain, American	37	Boxelder	7
Bean	73	Boysenberry	90

Bristlegrass, Yellow	93	Centaurea, Basketflower	26
Brome	21	Centipedegrass	40
Brome, Canada	21	Ceratostigma, Blue	26
Brome, Cheatgrass	21	Chard, Swiss	18
Brome, Chess	21	Chastetree, Lilac	111
Brome, Hairy	21	Cherry	81
Brome, Mountain	21	Cherry, Bessey	80
Brome, Rescue	21	Cherry, Black	81
Brome, Smooth	21	Cherry, Sour	80
Brome, Texas	21	Cherry, Western Sand	80
Broomcorn	99	Chestnut	25
Broomsedge	13	Chickweed	101
Brunnera, Heartleaf	11	China-aster, Common	23
Buckeye, Ohio	8	Chinaberry	66
Buckeye, Red	8	Chinafir, Common	33
Buckeye, Yellow	8	Chinkapin, Allegany	25
Buckthorn, Common	87	Chinkapin, Water	68
Buffalogourd	33	Chinkeridchee, Golden	
Buffalograss	21	Cape	70
Buffalograss, False	67	Chokeberry	16
Bugleweed, American	62	Chrysanthemum	28
Bulrush, American	92	Chrysanthemum,	
Bumelia, Gum	22	Florists	28
Bumelia, Woolybucket	22	Chrysanthemum,	
Burclover, California	64	Marguerite	28
Buttonbush, Common	26	Chrysanthemum,	
Buttonweed, Rough	37	Pyrenees	28
Cabbage	20	Clematis	29
Camellia, Common	23	Clematis, Pitchers	29
Canarygrass, Carolina	72	Clover	104
Canarygrass, Timothy	72	Clover, Alsike	104
Cane, Giant	16	Clover, Carolina	104
Canna, India	23	Clover, Low Hop	104
Cardinalflower	60	Clover, Red	104
Carnation	37	Club, Hercules'	113
Carpetgrass, Tropical	18	Cocklebur	112
Carriionflower	101	Cocklebur, Great	112
Carrot	35	Cocklebur, Italian	112
Catalpa, Northern	25	Cocklebur, Oriental	112
Catalpa, Southern	25	Cockscomb	26
Cattail, Common	106	Cockscomb, Feather	26
Cauliflower	20	Coffeetree, Kentucky	48
Cedar	55	Coleus	30
Cedar, Pfitzer	55	Columbine	14
Celery, Garden	14	Comandra, Common	30
Celtuce	57	Coneflower, Clasping	91

Copperleaf, Hophornbeam	7	Daisy, Transvaal	45
Copperleaf, Slender	7	Dalea, Slender	35
Coralberry, Indian-currant	102	Dandelion, Common	102
Cordgrass, Alkali	99	Datura, Jimsonweed	35
Cordgrass, Prairie	99	Datura, Sacred	35
Coreopsis, Bigflower	31	Dayflower, Virginia	30
Coreopsis, Plains	31	Daylily	49
Coreopsis, Threadleaf	31	Deadnettle, Henbit	57
Corktree, Amur	74	Deathcamas, Nuttall	114
Corn	113	Deervetch, Spanishclover	61
Cornbind, Hedge	78	Deutzia, Lemoine	36
Cornflower	26	Dewberry	90
Cornsalad, Beaked	108	Dianthera	36
Corydalis	31	Dianthera, American	36
Cotton, Asiatic Tree	46	Dock, Curly	91
Cotton, Australian	48	Dock, Pale	91
Cotton, Levant	46	Dock, Veiny	91
Cotton, Peruvian	48	Dogbane, Hemp	14
Cotton, Seaisland	46	Dogbane, Prairie	14
Cotton, Upland	46	Dogbane, Spreading	14
Cottonwood	79	Dogwood, Redosier	31
Cowpea, Catjang	110	Dogwood, Roughleaf	31
Cowpea, Common	110	Dracaena, Fragrant	38
Crabapple, Prairie	63	Dropseed, Hidden	101
Crabapple, Siberian	63	Dropseed, Meadow Tall	101
Crabgrass, Hairy	37	Dropseed, Poverty	101
Cranberry, High Bush	109	Dropseed, Prairie	101
Cranberrybush, European	109	Dropseed, Puffsheath	101
Crapemyrtle, Common	57	Dropseed, Sand	101
Creeper, Japanese	71	Dropseed, Tall	100
Creeper, Virginia	71	Dwarfandelion	56
Crotalaria	32	Echinacea, Blacksamson	38
Crotalaria, Showy	32	Eggplant, Garden	95
Croton, Single Fruited	32	Elder	92
Croton, Texas	32	Elder, American	92
Croton, Wooly	32	Elephantsfoot	39
Cucumber	32	Elm	107
Cucumbertree	62	Elm, American	106
Currant, Clove	88	Elm, Cedar	107
Currant, Golden	88	Elm, Siberian	107
Cushaw	33	Elm, Slippery	107
Cycas	33	Elm, Weeping	107
Cyclamen	33	Elm, Winged	106
Dahlia	35	Emmer	106
		Euonymus	41
		Euonymus, Bigleaf	

Wintercreeper	40	Firethorn	83
Eupatorium, Late	41	Firethorn, Laland	83
Eupatorium, Mistflower	41	Flatsedge, Chufa	34
Euphorbia, Flowering- spurge	41	Flatsedge, Nutgrass	34
Euphorbia, Hairy Spread- ing	41	Flatsedge, Schweinitz	34
Euphorbia, Narrow- seeded	41	Flatsedge, Slender	34
Euphorbia, Reticulate- seeded	41	Flatsedge, Straw-colored	35
Euphorbia, Snow-on- the-mountain	41	Flax, Common	60
Euphorbia, Spotted	41	Fleabane, Daisy	40
Euphorbia, Toothed	41	Fleabane, Horseweed	40
Eveningprimrose	69	Floweringquince	27
Eveningprimrose, Common	69	Fogfruit	60
Eveningprimrose, Cutleaf	69	Forsythia	42
Eveningprimrose, Oklahoma	69	Forsythia, Border	42
Eveningprimrose, Pale	69	Forsythia, Greenstem	42
Eveningprimrose, Rhombicpetaled	69	Foxtail, Carolina	10
Eveningprimrose, Serrateleaf	69	Foxtail, Water	10
Eveningprimrose, Showy	69	Fringetree, White	27
Falsedandelion, Leafsystem	83	Fuchsia	44
Falsedandelion, Rough	84	Gaillardia	44
Falseflax, Bigseed	23	Gaillardia, Common	44
Falseflax, Littlepod	23	Perennial	44
Falsegarlic, Yellow	68	Gaillardia, Showy	44
Falsehellebore, Woods	108	Gamagrass, Eastern	105
Fescue, Meadow	42	Gardenia	44
Fescue, Texas	42	Gaura, Biennial	44
Fig, Common	42	Gaura, Scarlet	44
Fig, Florida Strangler	42	Gaura, Wavyleaf	44
Fig, Indian Rubber	42	Gayfeather, Dotted	59
Figwort, Maryland	93	Gayfeather, Tall	59
Filbert, American	31	Geranium, Carolina	45
Filbert, Beaked	31	Gerbera, Flameray	45
Fingergrass, Slender	37	Germander, American	103
		Giantreed	16
		Gladiolus	45
		Globeamaranth	46
		Globeamaranth, Common	46
		Globemallow, Scarlet	100
		Glorybind, European	30
		Goatgrass, Jointed	8
		Goldaster	28
		Goldenraintree, Panicked	56
		Goldenrod	97
		Goldenrod, Grassleaf	97
		Goldenrod, November	97
		Goldenweed	14
		Goldstargrass, Common	51

Gooseberry	88	Hickory, Black	25
Goosefoot	27	Hickory, Mockernut	24
Goosefoot, Lambs- quarters	27	Hickory, Pignut	24
Goosefoot, Mapleleaf	27	Hickory, Shagbark	25
Goosegrass	39	Hoarhound, Common	64
Gourd, Missouri	33	Holly	52
Gramia, Blue	19	Holly, American	52
Gramia, Hairy	20	Hollyhock	10
Gramia, Sideoats	19	Honeylocust, Common	45
Gramia, Texas	20	Honeysuckle	61
Grape	112	Honeysuckle, Buckthorn	61
Grape, Bird	111	Honeysuckle, Ever- blooming	60
Grape, Sand	111	Hoptree, Common	83
Grape, Sweet Winter	111	Hornbeam, American	24
Grape, Winter	111	Horsechestnut, Common	8
Grapefruit	29	Horsegentian, Common	104
Grass, Corn	70	Horsenettle, Carolina	95
Grass, Deer Tongue	70	Horseradish	16
Greenbrier	94	Huckleberry	45
Greenbrier, Bristly	94	Hyacinth	51
Greenbrier, Carrion- flower	94	Hydrangea, Bigleaf	51
Greenbrier, Cat	94	Hydrangea, Smooth	51
Greenbrier, Common	94	Hymenopappus, White- bract	51
Greenbrier, Lanceleaf	94	Ingiangrass, Yellow	97
Greenbrier, Long-stalked	94	Indianwheat, Bottle- brush	76
Greenbrier, Saw	94	Indianwheat, Wooly	76
Groundcherry	75	Iris	54
Groundcherry, Cutleaf	75	Iris, Blueflag	53
Groundcherry, Prairie	75	Ironweed	109
Groundcherry, Velvety	75	Ironweed, Baldwin	109
Groundcherry, Virginia	75	Ironweed, Bur	109
Guar	33	Ironweed, Missouri	109
Hackberry	26	Ironweed, Western	109
Hackberry, Common	26	Ivy, Boston	71
Hackberry, Netleaf	26	Ivy, English	49
Hardinggrass	72	Ivy, Poison	87
Hawthorn	31	Jackintheppulpit, Common	15
Hawthorn, Green	31	Jackintheppulpit, Dragonroot	15
Heliotrope	49	Jasmine, Italian	54
Heliotrope, Salt	49	Jasmine, Showy	54
Hemp, Indian	14	Jasmine, Winter	54
Hibiscus, Chinese	50	Johnsongrass	98
Hickory, Bitternut	24		

Jointtail, Carolina	64	Macrocalyx	39
Jujube, Common	114	Magnolia	62
Junegrass, Prairie	56	Mallow, Running	64
Juniper	55	Mannagrass, Fowl	45
Juniper, Mexican	55	Maple	7
Juniper, Oneseed	55	Maple, Red	7
Juniper, Rockymountain	55	Maple, Silver	7
Knotweed	78	Maple, Sugar	7
Knotweed, Hedge	78	Mayapple, Common	77
Knotweed, Prostrate	78	Medic, Black	64
Kudzu	83	Melic, Threeflower	66
Laburnum, Goldenchain	56	Milkweed, Butterfly	16
Ladysthumb, Curltop	78	Milkweed, Oblongleaved	17
Larkspur	36	Milkweed, Showy	16
Laurelcherry, Carolina	80	Millet, Foxtail	93
Lavender	58	Mimosa	66
Lespedeza	59	Mockorange, Big Scentless	74
Lespedeza, Creeping	58	Mockorange, Lemoine	74
Lespedeza, Hairy	58	Mockorange, Sweet	74
Lespedeza, Slender	58	Monolepis, Nuttall	67
Lespedeza, Stuves	58	Moonseed, Carolina	30
Lespedeza, Trailing	58	Morningglory	53
Lespedeza, Violet	58	Morningglory, Bigroot	53
Lespedeza, Wand	58	Morningglory, Common	53
Lettuce, Canada	57	Morningglory, Ivyleaf	53
Lettuce, Garden	57	Mountainash, American	97
Lilac, Common	102	Mountainmint, Hairy	83
Lilac, Persian	102	Muhly, Green	67
Lily, Caucasian	59	Muhly, Hairawn	67
Lily, Regal	59	Muhly, Rock	67
Linden, American	103	Muhly, Wirestem	67
Lionsheart, Virginia	75	Mulberry	67
Lobelia, Bigblue	60	Mulberry, French	22
Lobelia, Downy	60	Mulberry, Red	67
Locust, Black	88	Mulberry, White	67
Locust, Roseacacia	88	Mullein, Moth	108
Loganberry	90	Muskmelon	32
Lomatium	60	Mustard	20
Lomatium, Carrot-leaved	60	Mustard, Tumble	94
Lopseed, American	74	Nandina	68
Lotus, American	68	Narcissus	68
Lovegrass, Carolina	40	Nasturtium, Common	106
Lovegrass, India	40	Nectarine	81
Lovegrass, Purple	40	Needleandthread	102
Lovegrass, Red	40	Nettle, Weaksting	108
Lovegrass, Sand	40	Nimblewill	67
		Ninebark, Common	75

Ninebark, Twinpod	75	Perovskia, Russiansage	72
Oak	86	Persimmon, Common	37
Oak, Blackjack	85	Persimmon, Japanese	37
Oak, Bur	85	Petunia, Common	72
Oak, Chinkapin	85	Phlox	74
Oak, Pin	85	Phlox, Downy	74
Oak, Poison	87	Photinia	74
Oak, Post	85	Pine	76
Oak, Scarlet	84	Pine, Austrian	75
Oak, Southern Red	85	Pine, Shortleaf	75
Oak, Threelobe Red	85	Piqueria, Fragrant	76
Oak, Water	85	Planetree, American	77
Oak, White	84	Plantain, Indian	22
Oat, Common	17	Plantain, Manyseeded	76
Okra	49	Plantain, Paleseed	76
Onion, Garden	9	Plantain, Rippleseed	76
Orange, Hardy	29	Plum	82
Orchardgrass	35	Plum, American	79
Orchid	40	Plum, Chickasaw	79
Oregongrape	62	Plum, Ground	17
Oxalis, Creeping	70	Plum, Wildgoose	80
Pagodatree, Japanese	97	Poinciana, Paradise	77
Panicum, Tennessee	70	Poinsettia, Common	41
Panicum, Texas	70	Pokeberry, Common	75
Panicum, Variable	70	Polypogon, Rabbitfoot	78
Papermulberry, Common	21	Poplar	79
Parsley, Common Garden	72	Poplar, Bolleana	78
Parsnip, Garden	71	Poplar, Eastern	79
Paspalum	71	Poplar, Lombardy	79
Paspalum, Sand	71	Poplar, Narrowleaf	78
Passionflower, Maypop	71	Poplar, Plains	79
Pea, Austrian Winter	76	Poplar, White	78
Pea, Field	76	Poppymallow, Finger	22
Pea, Garden	76	Poppymallow, Low	22
Peach	80	Possumhaw	52
Peanut	14	Potato	95
Pear, Common	84	Prairieclover, Purple	72
Peashrub, Siberian	24	Prairieclover, Slender	
Pecan	24	White	72
Pecan, Bitter	25	Pricklepoppy, Mexican	15
Penstemon, Cobaea	71	Pricklyash, Common	113
Penstemon, James	71	Pricklypear, Common	69
Penstemon, Pale	72	Privet	59
Peony	70	Privet, Amur	59
Pepper	23	Privet, California	59
Peppervine	11	Privet, European	59
Pepperweed, Virginia	58	Privet, <i>Ibolium</i>	59

Pumpkin	33	Sagebrush, Cudweed	16
Puncturevine	103	Sagebrush, Louisiana	16
Purpletop	104	Sagebrush, Mexican	16
Purslane, Common	79	Salsify, Vegetable-	
Pussytoes, Plantainleaf	13	oyster	103
Pussywillow	91	Saltgrass, Inland	38
Pyracantha	83	Saltgrass, Seashore	38
Quackgrass	8	Sandbur, Mat	26
Quince, Common	34	Sandgrass, Purple	104
Radish, Garden	86	Sandreed, Big	22
Radish, White Icicle	87	Sandreed, Prairie	22
Ragweed	11	Sassafrass, Common	92
Ragweed, Common	11	Surfpea, Digitate	83
Ragweed, Giant	11	Surfpea, Slimflower	83
Ragweed, Western	11	Surfpea, Tallbread	83
Raspberry	90	Sedge	34
Raspberry, Black	89	Sedge, Bicknell	24
Raspberry, Red	89	Sedge, Fox	24
Redbud, Eastern	27	Seedbox	61
Redcedar, Canaert		Shepherdspurse	23
Eastern	55	Shootingstar, Common	38
Redcedar, Eastern	55	Shrubalthea	50
Redcedar, Globe Eastern	55	Silene, Sleepy	93
Redcedar, Pyramidal		Silverbell, Mountain	48
Eastern	55	Silverberry	38
Redcedar, Silver Eastern	55	Skullcap, Hyssop	93
Redtop	9	Skullcap, Small	93
Redtop, Tall	104	Smartweed, Dotted	78
Reed, Common	74	Smartweed, Pennsylvania	78
Rhododendron	87	Smoketree, Common	31
Rhubarb, Garden	87	Snailseed, Carolina	30
Rockcress, Smooth	14	Snakeweed, Broom	48
Rose	88	Snakeweed, Tarragon	48
Rosegentian, Prairie	91	Snapdragon, Common	13
Rose-of-sharon	50	Snowball, Japanese	110
Rosinweed	14	Snowberry	102
Rubberplant	42	Soapberry, Western	92
Ruellia, Limestone	91	Soapweed, Small	113
Russianolive	38	Solomonplume, Feather	94
Rye	93	Sophora, Texas	97
Ryegrass, Italian	60	Sorghum	98
Ryegrass, Perennial	60	Sorrel, Heartwing	91
Sacaton, Alkali	100	Sowthistle, Prickly	97
Safflower	24	Soybean	95
Sage, Azure	92	Speedwell, Purslane	109
Sage, Lanceleaf	92	Spelt	106
Sage, Pitchers	92	Spiderflower, Bee	30

Spiderflower, Yellow	30	Threeawn, Curly	15
Spikenard, False	94	Threeawn, Curtiss	15
Spikerush, Slender		Threeawn, Forktip	15
Umbelled	42	Threeawn, Prairie	15
Spikerush, Vahl Umbelled	42	Threeawn, Purple	15
Spikesedge, Blunt	38	Threeawn, Slimspike	15
Spikesedge, Slender	38	Tickclover	36
Spinach	100	Tickclover, Hoary	36
Spinach, New Zealand	103	Tickclover, Maryland	36
Spirea, Japanese	100	Tickclover, Panicked	36
Sprangletop, Red	58	Tickclover, Sessile	36
Spruce	75	Timothy	74
Squash, Winter	33	Tithonia, Scarlet	103
Starglory, Scarlet	84	Toadflax, Oldfield	59
Stenosiphon, Flaxleaf	101	Tobacco, Common	68
Stillingia, Queensdelight	101	Tomato, Common	61
Strawberry	42	Torchlily, Hotpoker	56
Strawberry, Virginia	42	Tragia, Catnip-leaved	103
Sudangrass	99	Treadsoftly, Texas	30
Sumac, Fragrant	87	Treebine, Ivy	28
Sumac, Skunkbrush	87	Trillium, Prairie	104
Sumac, Smooth	87	Triodia, Longspike	104
Sundrops, Ozark	69	Triodia, Rough	104
Sunflower	49	Triodia, White	104
Sunflower, Ashy	49	Tuftroot, Variable	37
Sunflower, Common	49	Tulip	106
Sunflower, Jerusalem-		Turnip	20
artichoke	49	Uniola, Broadleaf	108
Sunflower, Prairie	49	Venuslookingglass,	
Sunflower, Stiff	49	Clasping	100
Sunflower, Stiffhaired	49	Venuslookingglass,	
Sweetclover, White	66	Small	99
Sweetclover, Yellow	66	Verbena	109
Sweetgum, American	60	Verbena, Bigbract	109
Sweetpea	57	Verbena, Rose	109
Sweetpea, Perennial	57	Verbena, White	109
Sweetpotato	52	Verbena, Wooly	109
Switchgrass	71	Vetch, American	110
Sycamore	77	Vetch, Hairy	110
Tansymustard	36	Viburnum	110
Tansymustard, Pinnate	36	Viburnum, Doublefile	110
Teosinte	40	Viburnum, Rusty Black-	
Tephrosia, Virginia	102	haw	110
Thistle	28	Vine, Wild Potato	53
Thistle, Field	28	Vine-mesquite	70
Threeawn, Arrowfeather	15	Violet	111
Threeawn, Churchmouse	15	Violet, Butterfly	111

Violet, Missouri	111	Wildbean, Trailing	102
Virginsbower	29	Wildindigo, Blue	18
Wahoo	106	Wildindigo, Cream	18
Wallflower, Common	27	Wildrye, Blue	39
Walnut, Eastern Black	54	Wildrye, Canada	39
Walnut, Persian	54	Wildrye, Hairy	39
Watercress	88	Wildrye, Russian	39
Waterhemlock, Spotted	28	Wildrye, Virginia	39
Waterhemp	8	Willow	92
Waterhyssop	18	Willow, Black	92
Waterlily, American	68	Willow, Coastalplain	92
Watermelon	29	Willow, Sandbar	92
Waterprimrose	56	Windmillgrass, Tumble	27
Waterprimrose, Floating	56	Wistaria	112
Waxmyrtle, Southern	68	Witchgrass, Common	70
Wedgescale, Prairie	100	Witchgrass, Fall	58
Wedgescale, Slender	100	Witchhazel, Common	48
Wheat	105	Wolfberry, Pale	61
Wheatgrass, Beardless		Woodnettle, Canada	57
Bluebunch	8	Woodsorrel, Slender	
Wheatgrass, Bluestem	8	Yellow	70
Wheatgrass, Crested	8	Woodsorrel, Violet	70
Wheatgrass, Slender	9	Yarrow, Common	7
Wheatgrass, Stiffhair	9	Yellowwood, American	29
Wheatgrass, Tall	8	Youngberry	91
Wheatgrass, Thickspike	8	Yucca, Adamsneedle	113
Wildbean, Small	102	Zinnia, Common	114

